



Service Manual

Video Cassette Recorder

VCR 2350

VCR 4350

VCR 5350

ALL K70-MECHA (Hi-Fi / MONO)

Model: (PAL MODELS)

DV-K816D/K416D/K216D Series

DV-K826D/K426D/K226D Series

DV-K846D/K446D/K24D Series

DV-K866D/K466D/K266D Series

DV-K876D/K476D/K276D Series

DV-K896D/K496D/K296D Series

DV-K9A6D/K4A6D Series

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SAFETY & PRECAUTIONS

SAFETY CHECK AFTER SERVING

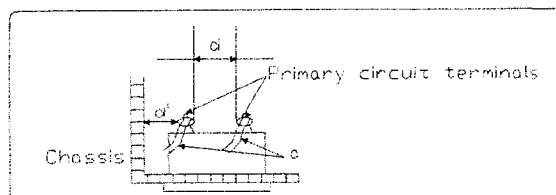
Examine the area surrounding the repaired location for damage or deterioration. Observe that screw, parts and wires have been returned to original positions. Afterwards, perform the following tests and conform the specified values in order to verify compliance with safety standards.

1. Insulation resistance test

Confirm the specified insulation resistance between power cord plug prong and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) is greater than values given in table 1 below.

2. Dielectric strength test

Confirm specified dielectric strength between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input output terminals, microphone jack, ear phone jacks, etc.) is greater than values given table 1.



3. Clearance distance

When replacing primary circuit component, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table below.

Rating for selected areas

AC Line Voltage	Region	Insulation Resistance	Dielectric Strength	Clearance Distance(d),(d')
100V	Japan	$\geq 1\text{M}\Omega/500\text{V DC}$	1kV AC 1min.	≥ 3
110 to 130V	USA & Canada	-	900V AC 1min.	≥ 3.2
* 110 to 130V 200 to 240V	Europe Australia Latin America	$\geq 10\text{M}\Omega/500\text{V DC}$	4kV AC 1min.	$\geq 6(d)$ $\geq 8(d')$ (a : Power cord)

*: Class model only

NOTE

This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality

SAFETY & PRECAUTIONS

4. Leakage current test

Confirm specified or lower leakage current between B(earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input output terminals, microphone jacks, earphone jacks, etc.)

Measuring method:(Power ON) Insert load Z between B(earth ground, power cord plug prongs) and exposed accessible parts.

Use on AC voltmeter to measure across both terminals of load Z.

See figure2 and following table.

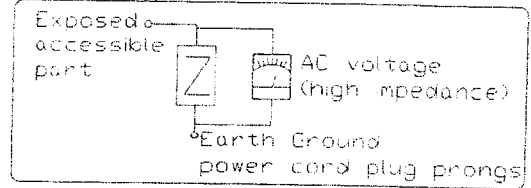






Fig.2

Leakage current ratings for selected are as

AC Line Voltage	Region	Load Z	Leakage Current <i>i</i>	Clearance Distance(d),(mm)
100V	Japan	 1KΩ	$i \leq 1\text{mA}_{\text{rms}}$	Exposed accessible parts
110 to 130V	USA & Canada	 15kμF 1KΩ	$i \leq 0.5\text{mA}_{\text{rms}}$	Exposed accessible parts
110 to 130V 200 to 240V	Europe Australia	 2KΩ	$i \leq 0.7\text{mA}_{\text{peak}}$ $i \leq 2\text{mA}_{\text{dc}}$	Antenna earth terminals
		 50KΩ	$i \leq 0.7\text{mA}_{\text{peak}}$ $i \leq 1\text{mA}_{\text{dc}}$	Other terminals

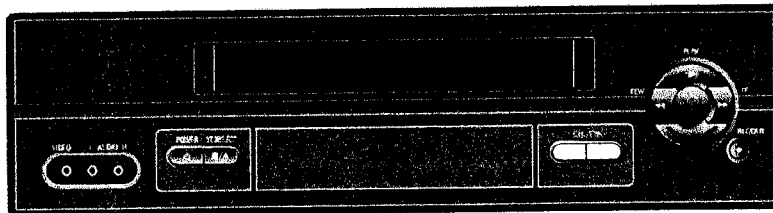
NOTE

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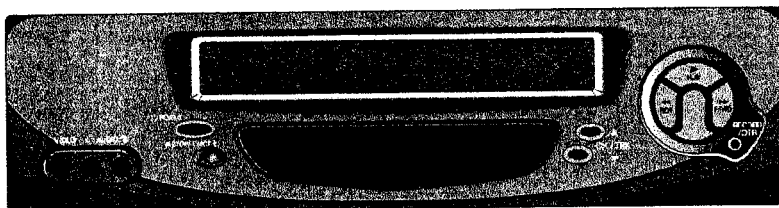
EXTERNAL VIEWS

1. FRONT VIEWS FUNCTION

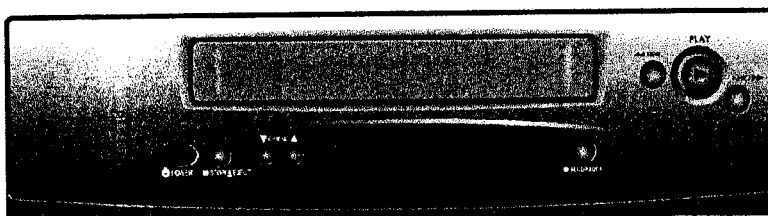
DV-K816D FRONT VIEW



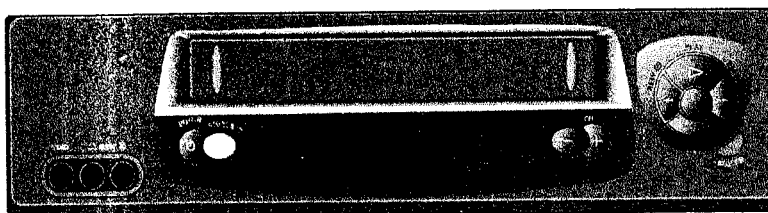
DV-K826D FRONT VIEW



DV-K836D FRONT VIEW

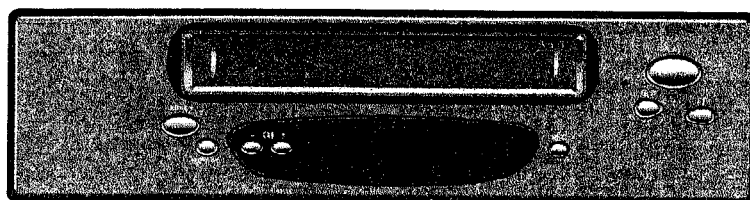


DV-K846D FRONT VIEW

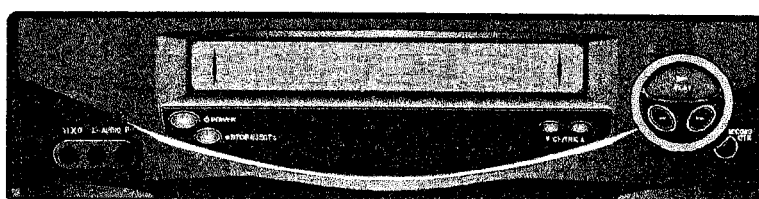


EXTERNAL VIEW

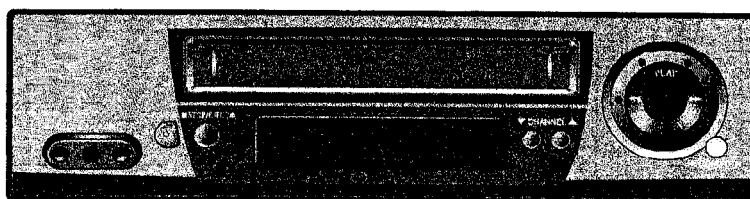
DV-K866D FRONT VIEW



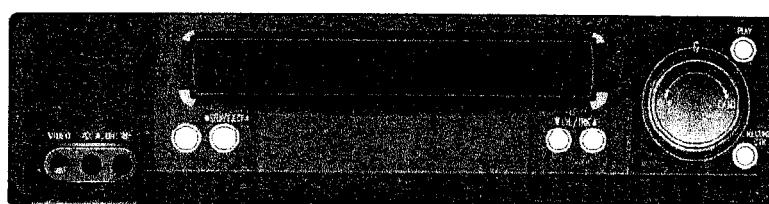
DV-K876D FRONT VIEW



DV-K896D FRONT VIEW



DV-K9A6D FRONT VIEW



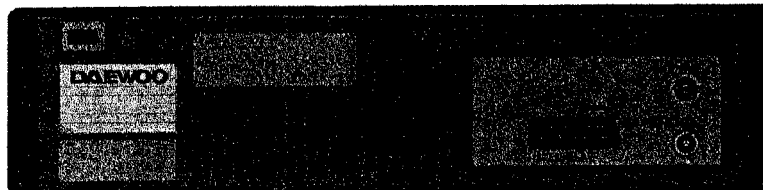
POWER
STOP / EJECT
RECORD
FRONT VIDEO/AUDIO INPUT JACK

REWIND / REVIEW
FAST FORWARD / CUE
PLAY BACK
CHANNEL UP / DOWN

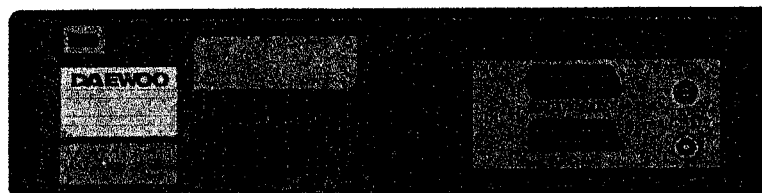
EXTERNAL VIEWS

2. REAR VIEWS FUNCTION

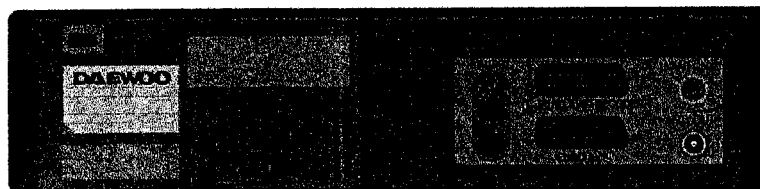
MONO 1 SCART TYPE REAR VIEW



MONO 2 SCART TYPE REAR VIEW



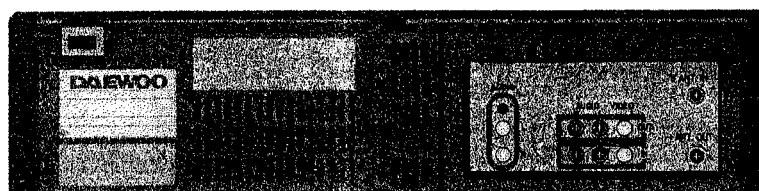
HI-FI 2 SCART TYPE REAR VIEW



MONO RCA TYPE REAR VIEW



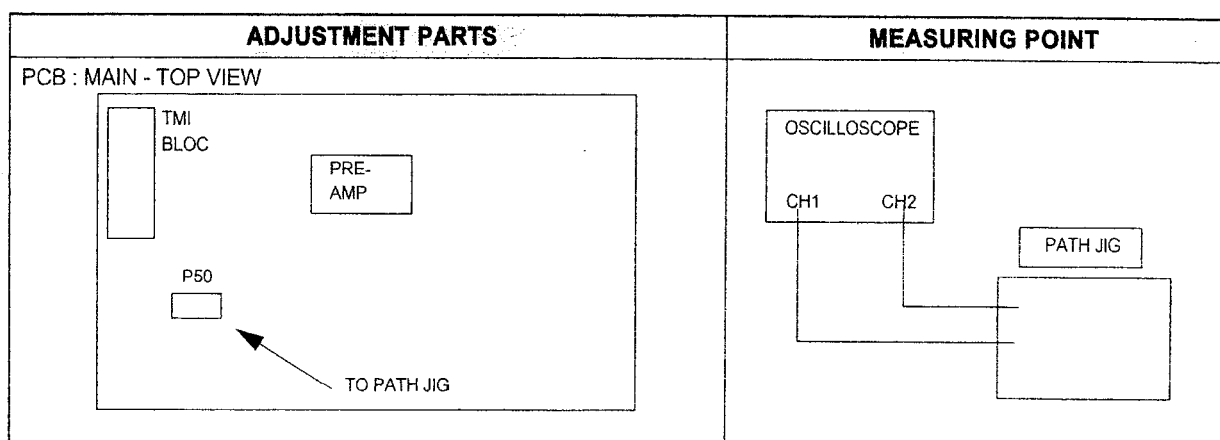
HI-FI RCA TYPE REAR VIEW



ELECTRICAL ADJUSTMENT

1. PLAYBACK PHASE

ITEM	MODE	ADJUSTMENT POINT	CHECK POINT	TEST EQUIPMENT	TEST TAPE	INPUT SIGNAL
6.5H ADJUSTMENT	PLAY	[REC] BUTTON	PIN 4 & PIN 5 OF P504	OSCILLOSCOPE	DP-2	NO SIGNAL



ADJUSTMENT PROCEDURE

1. Play back the test tape. (DP-2)
2. Set the oscilloscope to the CHOP mode. Connect CH1 to the SW PULSE (PIN 4 of P504)
3. Connect CH2 to the ENVE signal (PIN5 of P504)
4. Insert PATH JIG and press "REC" button on the remote control.
5. Check the position of the V-sync from the rising edge of the SW pulse.
(Standard : 6.5H \pm 0.5H)

SPECIFICATIONS

GENERAL	
Power Requirement	AC 230V, 50Hz
Power Consumption	Max. 17W (in REC mode)
Temperature	5×C ~ 35×C (Operating) -20×C ~ 60×C
Operating position	Horizontal only
Dimensions (W x H x D)	360 x 90 x 288 (mm)
Weight	Approx. 3.85 Kg
Format	VHS standard
Tape Width	12.65mm
Tape Speed	(SP) : 23.39mm/sec (LP) : 11.70mm/sec
Maximum Recording Time with full-size cassette	(SP) :240min, with E-240 video cassette (LP) :480min, with E-240 video cassette
VIDEO	
Signal system	PAL colour and CCIR monochrome signals, 625 lines/50 fields
Recording system	Rotary two-head helical scan with a slant double-azimuth combination video head
Input	1.0Vp-p, 75ohms, unbalanced
Output	1.0Vp-p, 75ohms, unbalanced
Signal-to-Noise ratio	45dB (Rhode & Schwarz noise meter) with NETTETE IMAGE control at center position
Horizontal resolution	240 lines with NETTETE IMAGE control at center position
AUDIO	
Recording system	Longitudinal track
Input	-8dBm, (CENELEC standard), more than 47 k-ohms, unbalanced
Output	-6dBm, (CENELEC standard), less than 1k-ohms, unbalanced(100k-ohms, load)
Frequency Range	100Hz to 8,000Hz
Signal to Noise Ratio	More than 38dB
Audio Distortion	Less than 3% (SP)
TUNER	
Tuning system	Voltage synthesized tuner Programmable V/S 99CH (Hyper band)
RF Output	UHF channel 21~69 (52)
TIMER	
Memory programmable	99 CH
Back up time	Less than 1 Min.
Clock exactness	In accordance with the exactness of power supply frequency (50Hz)
ACCESSORIES	
Provided Accessories	Remote control unit, RF Cable, Battery

* Design and specification can be subjected to change without notice.

CHANNEL COVERAGE

SYSTEM	PAL, SECAM-B/G, PAL-I/I PAL, SECAM-B/G, D/K, HYPER BAND
CHANNEL	VHF Ch 2~12 UHF Ch 21~69 CATV Ch X,Y,Z S1~S41

INPUT/OUTPUT JACK TYPE

Model	EUROPE	Asia, South Africa, Australia
Jack Type	SCART Type	RCA Jack (Phone Jack)

VOLTAGE CHART

PDC/VPS IC (IC151, LC74793)

PIN NO.	REC	PB
1	0	0
2	2.64	2.68
3	2.68	2.72
4	0	0
5	0	0
6	3.7	3.7
7	3.9	3.9
8	4.98	5.12
9	0	4.74
10	0	0
11	1.63	3.18
12	1.63	3.18
13	0.82	1.35
14	0.01	0.01
15	5.09	5.12
16	2.75	3.02
17	2.55	2.57
18	4.67	4.72
19	5.01	5.02
20	4.99	5.06
21	0	0
22	3.74	3.79
23	5.05	5.11
24	5.08	5.13

EEPROM (IC503, ATM24C16)

PIN NO.	REC	PB
1	0	0
2	0	0
3	0	0
4	0	0
5	3.9	3.9
6	3.9	4
7	0	0
8	5.24	5.29

MOTOR DRIVE IC (IC502, KA3082)

PIN NO.	REC	PB
1	0	0
2	0.55	0.55
3	8.78	0.88
4	6.24	6.24
5	0.01	0.01
6	0.01	0.01
7	12.12	11.74
8	12.12	11.74
9	0.91	0.91
10	0.55	0.55

VOLTAGE CHART

A/V ICHIP IC (IC301, HA118517F, HITACHI SHRINK VERSION)

PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB
1	2.5	2.5	26	2.1	2.1	51	0	0	76	2.2	2.4
2	2.5	2.5	27	0	0	52	2.4	2.4	77	4.5	4.5
3	0	0	28	2.8	2.8	53	2.8	2.8	78	2.8	2.8
4	2.5	2.5	29	1.9	1.9	54	1.9	1.9	79	3.78	2.1
5	0	0	30	2.8	2.8	55	2.1	2.1	80	2.5	2.6
6	1.4	0	31	2.8	2.8	56	2.8	2.8	81	1.2	2.4
7	2.5	2.5	32	0	0	57	2.5	2.5	82	2.4	2.4
8	2.5	2.5	33	0	0	58	2.8	2.8	83	2.2	2.2
9	2.5	2.5	34	0	0	59	2.8	2.8	84	0	3.3
10	2.5	2.5	35	2.7	2.7	60	2.8	2.8	85	0	0
11	2.5	2.5	36	5	5	61	5	5	86	2.3	2.1
12	5	5	37	0.1	0.1	62	5	5	87	2.3	2.1
13	2.1	1.6	38	5	5	63	5	5	88	2.3	2.1
14	2.1	1.6	39	2.7	2.7	64	4.25	4.25	89	2.3	2.1
15	2.3	2.3	40	5	5	65	2.1	2.3	90	5	5
16	0	0.7	41	5	5	66	5	5	91	2.3	2.1
17	2.5	1.8	42	1.7	1.7	67	5	5	92	2.3	2.1
18	2.1	2.1	43	5	5	68	0	0	93	2.3	2.1
19	2.8	2.8	44	2.5	2.5	69	2.5	2.5	94	2.3	2.1
20	2.8	2.8	45	0	0	70	2.5	2.5	95	2.8	2.8
21	2.1	2.1	46	1.9	1.9	71	2.1	2.1	96	5	5
22	2.4	2.2	47	0	0	72	1.7	1.7	97	0	0
23	2.8	2.8	48	0	0	73	2.1	2.1	98	2	2
24	2.1	2.1	49	0	0	74	2.7	2.7	99	0	0
25	1.4	1.4	50	0.3	0.3	75	2.1	2.1	100	2.5	2.5

A/V SW IC (IC601, MM1443XJ)

PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB
1	3	3	10	6	6	19	0	0	28	2.8	2.8
2	12	12	11	0	0	20	6	6	29	2	2
3	3	3	12	6	6	21	6	6	30	3	3
4	12	12	13	0	0	22	6	6	31	2	2
5	3	3	14	6	6	23	6	6	32	-	-
6	6	6	15	0	0	24	6	6	33	-	-
7	6	6	16	6	6	25	6	6	34	0	0
8	6	6	17	0	0	26	6	6			
9	0	0	18	0	0	27	6	6			

VOLTAGE CHART

HI-FI IC (IC251, LA72637M)

PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB
1	3.0	2.2	17	0.0	0.0	33	0.1	0.1	49	0.0	0.0
2	0.1	0.1	18	4.2	2.8	34	0.0	0.0	50	3.1	2.5
3	0.0	0.0	19	4.2	2.8	35	2.0	2.1	51	0.0	0.0
4	2.1	2.5	20	5.1	5.1	36	5.1	5.1	52	0.0	0.0
5	2.5	2.5	21	0.1	0.0	37	2.6	2.5	53	2.6	1.8
6	0.1	0.1	22	0.0	0.0	38	2.5	2.5	54	2.5	2.5
7	0.0	0.0	23	0.0	0.0	39	2.5	2.5	55	0.0	0.0
8	0.0	0.0	24	2.5	0.0	40	2.6	2.5	56	4.5	4.5
9	0.3	0.1	25	4.3	2.0	41	2.5	2.5	57	2.7	2.6
10	2.5	2.5	26	4.2	2.0	42	0.2	0.1	58	4.5	4.5
11	2.5	2.5	27	2.3	0.0	43	0.0	0.0	59	0.0	0.0
12	2.5	2.5	28	0.0	0.6	44	0.1	0.1	60	10.0	10.0
13	5.0	2.6	29	2.5	2.6	45	2.5	2.5	61	0.0	0.0
14	5.0	5.1	30	5.1	5.1	46	2.0	2.5	62	6.0	6.0
15	2.5	2.5	31	4.0	4.0	47	0.0	0.0	63	0.0	0.0
16	2.5	2.5	32	4.2	4.2	48	0.0	0.0	64	3.1	2.5

NICAM IC (IC051, MSP3417DQ)

PIN NO.	EE	PIN NO.	EE
1	0.03	27	0
2	2.29	28	0
3	0.01	29	0
4	0.01	30	3.69
5	0	31	3.7
6	4.95	32	0
7	3.95	33	8.25
8	3.7	34	6.57
9	0	35	0
10	0	36	3.66
11	0	37	0
12	0	38	0
13	0	39	3.68
14	0	40	3.68
15	0	41	3.68
16	4.95	42	3.68
17	0	43	2.54
18	0.01	44	3.69
19	0	45	0

A2 IC (MSP3407DQ)

PIN NO.	EE	PIN NO.	EE
1	0.01	27	0
2	0	28	0
3	0.01	29	0
4	0.01	30	3.72
5	0	31	3.73
6	5.02	32	0
7	3.6	33	8.15
8	3.3	34	6.47
9	2.47	35	0
10	2.46	36	3.68
11	2.43	37	0
12	0.02	38	0
13	0.03	39	3.71
14	0.02	40	3.71
15	0.02	41	3.71
16	5.02	42	3.71
17	0	43	2.57
18	0.02	44	3.72
19	0.01	45	0

VOLTAGE CHART

PIN NO.	EE	PIN NO.	EE
20	5.1	46	4.92
21	0	47	1.5
22	0	48	1.5
23	0	49	0
24	1.66	50	0
25	1.69	51	2.32
26	0	52	2.26

PIN NO.	EE	PIN NO.	EE
20	5.12	46	4.98
21	0	47	1.51
22	0	48	1.51
23	0	49	0
24	1.69	50	0
25	1.7	51	2.35
26	0	52	2.27

REGULATOR IC (IC802, KA431AZ)

PIN NO.	REC	PB
1	2.49	2.49
2	0	0
3	4.82	4.82

TMI (RF101, LGTMI-SLQ1-S)

PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB
1	4.83	4.9	7	31.9	31.9	13	4.9	0	19	1.08	0
2	0	0	8	1.91	0	14	4.9	0	20	0.23	0.03
3	3.7	3.7	9	0	0	15	0	0	21	2.43	0
4	4.85	4.9	10	0	0	16	31.9	31.9	22	2.01	0.01
5	4	3.9	11	3.9	4	17	0	0	23	2.69	0
6	0	0	12	3.7	3.7	18	0	0	24	2.74	0

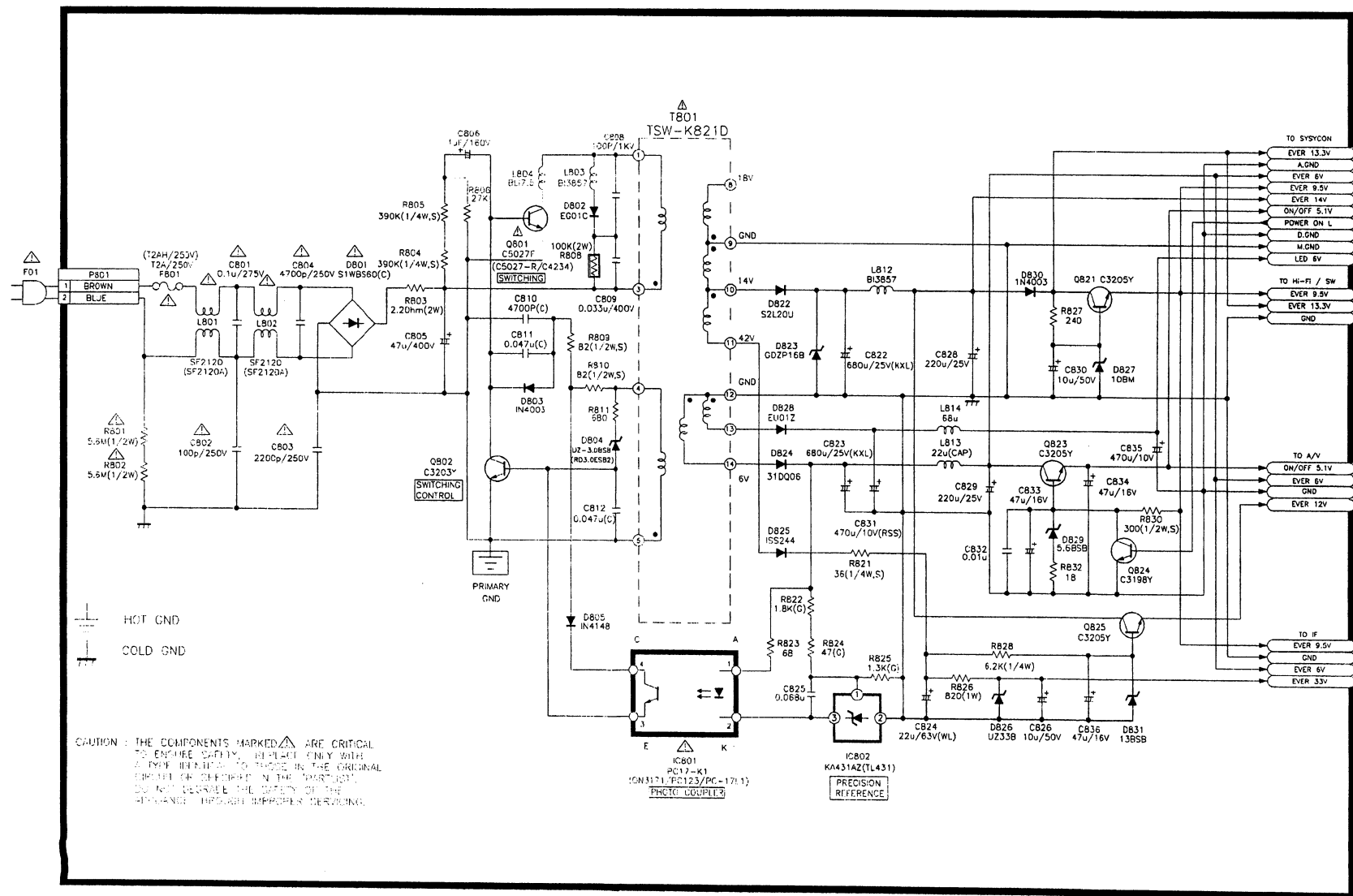
VOLTAGE CHART

METHOD TO DISCRIMINATE WHICH VIDEO IC IS APPLIED FOR EACH K-MECHA MODEL

MODEL			K30		K40	K50		K60D	K60S		K70D
APPLIED VIDEO IC			HITACHI		SANYO	SANYO		HITACHI	SANYO		HITACHI
			HA118511F	HA118517F (SHRINK TYPE)	LA71594M	LA71594M	LA71598M	HA118517F	LA71594M	LA71598M (SRINK TYPE)	HA118517F
							LA71598SM (SRINK TYPE)			LA71598SMSM (SRINK TYPE)	
APPLIED HI-FI IC			TDA9605H		NA	TDA9605H		TDA9605H	TDA9605H		LA72637M
APPLIED AV SWITCHING IC			LA7158M		LA7158M	LA7158M		MM1443XJ	LA7158M		MM1443XJ
ADJACENT COMPONET VALUES WHICH HAVE TO BE MODIFIED ACCORDING TO THE APPLIED VIDEO IC	LOC.	C210 (R)	2.2uF/50V	10uF/16V				2.2uF/50V			2.2uF/50V
		C305 (C)	39pF	56pF				56pF			56pF
		C415 (R)	10uF/16V	2.2uF/50V				10uF/16V			10uF/16V
		L302 (A)	82uH	150uH				150uH (RADIAL)			150uH(RADIAL)
		R304 (A)	1.3K OHM	2.2K OHM				2.2K OHM			2.2K OHM
		R307 (C)	1.8M OHM	DELETE				DELETE			DELETE
		RJ37 (C)	DELETE	3216 TYPE				3216 TYPE			3216 TYPE
		R303 (C)			10K OHM	10K OHM	20K OHM		10K OHM	20K OHM	
		R304 (A)			18K OHM	18K OHM	10K OHM		18K OHM	10K OHM	
PCB MARKING (S/N)			97P65221MA		97P65251MA	97P65260MA 97P65280MA		97P65270MA	97P65272MA		97P65277MA
PCB MARKING ((B/W INVERTED CHR.))								K60D	K60S	K70D	

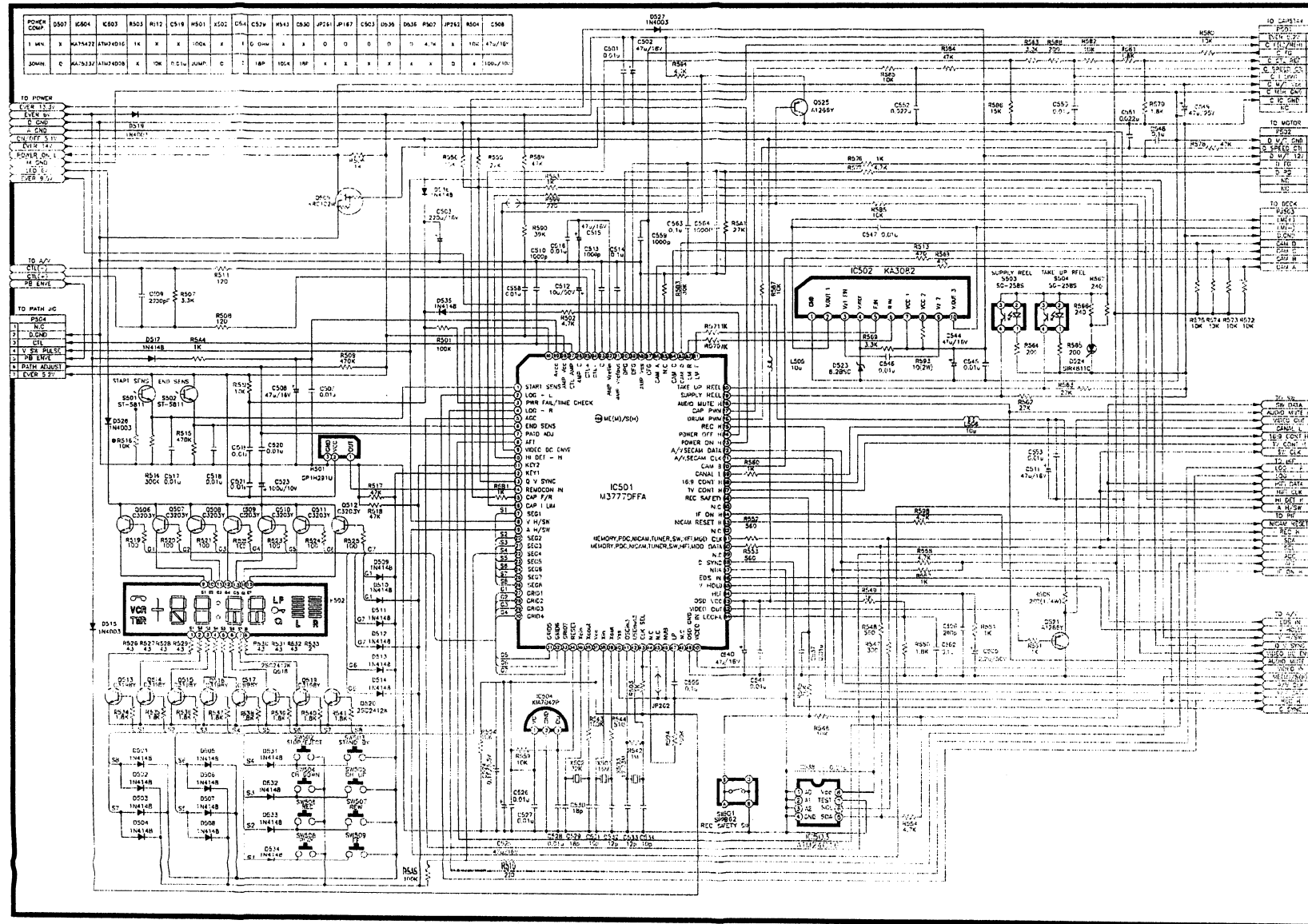
CIRCUIT DIAGRAM

1. POWER CIRCUIT DIAGRAM (230V ONLY)

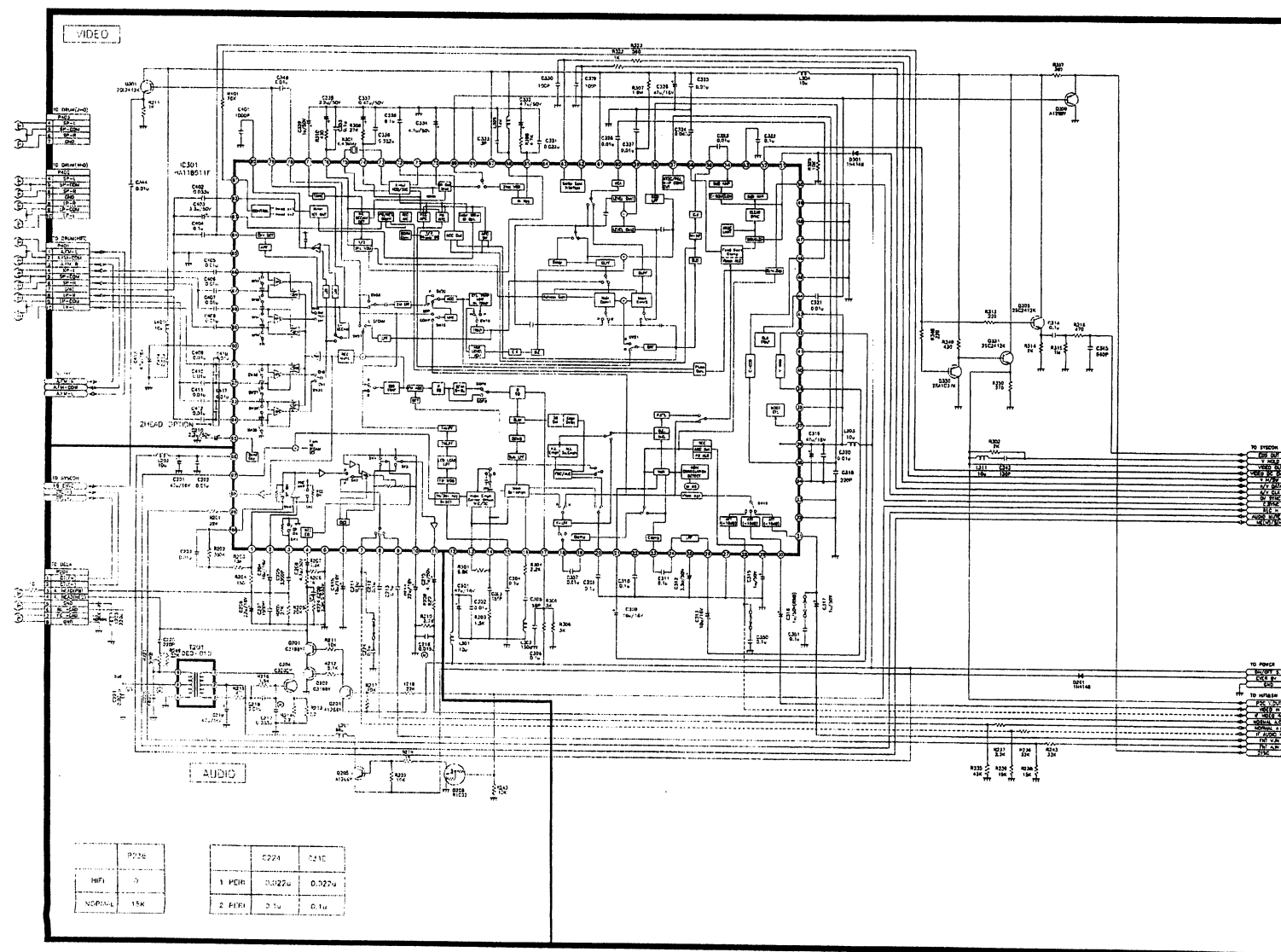


CIRCUIT DIAGRAM

2. SYSCON CIRCUIT DIAGRAM



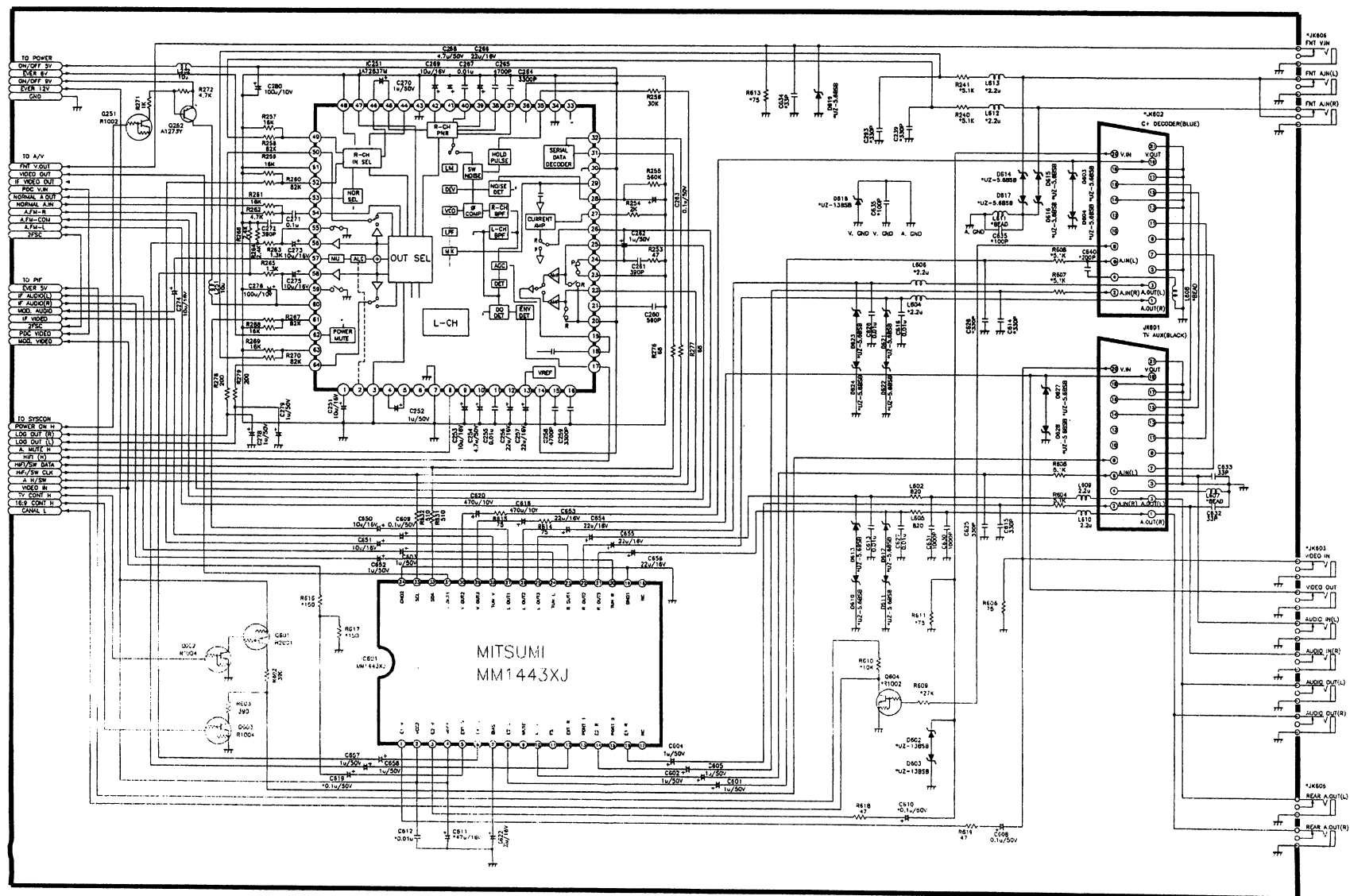
3. AV CIRCUIT DIAGRAM (PAL)



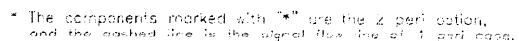
4. PIF CIRCUIT DIAGRAM



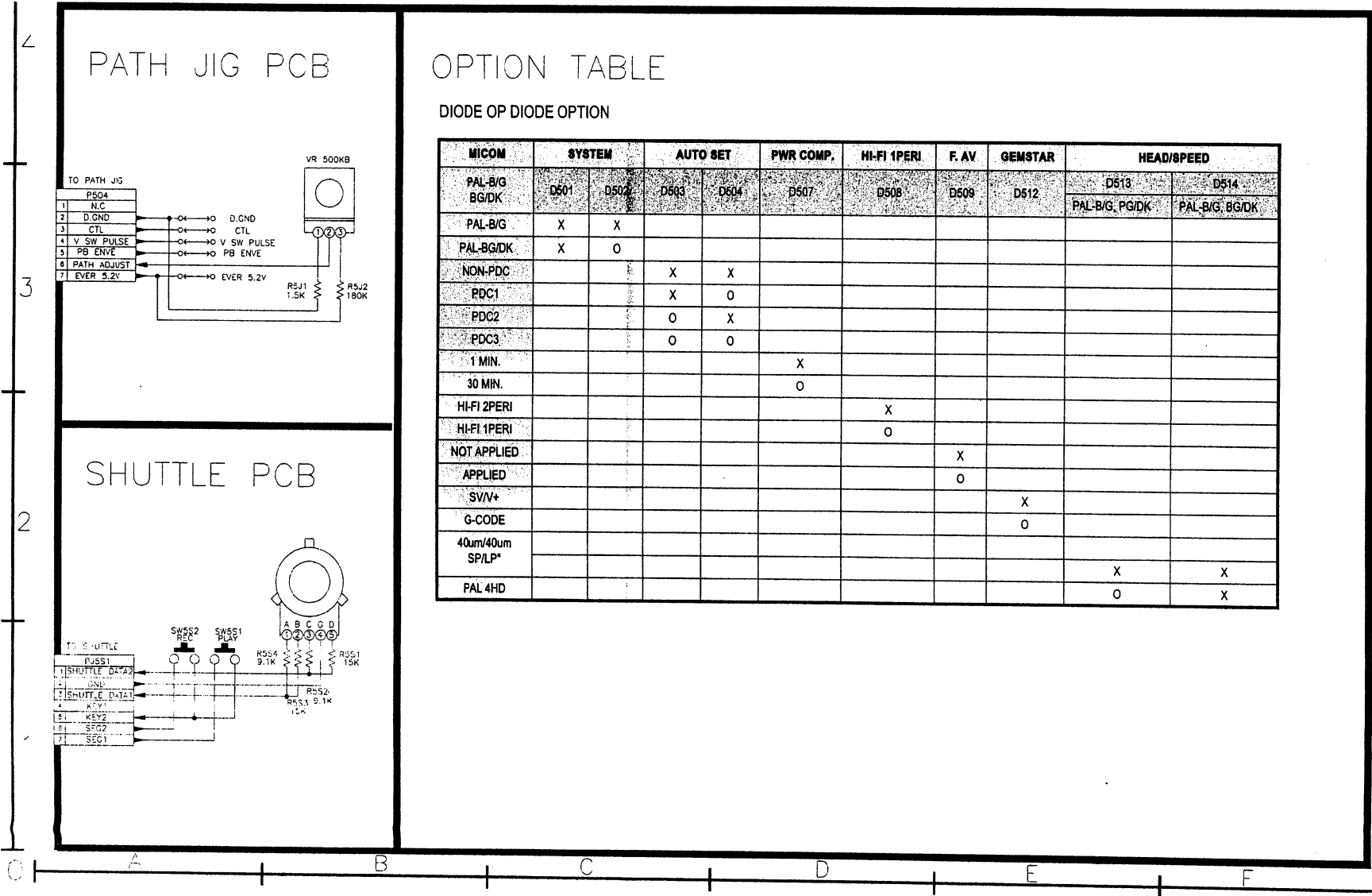
5. HIFI & SW CIRCUIT DIAGRAM



6. SW CIRCUIT DIAGRAM

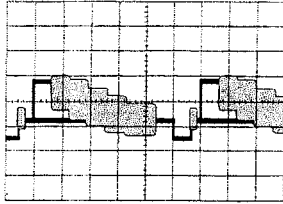


7. SHUTTLE / PATH JIG CIRCUIT DIAGRAM

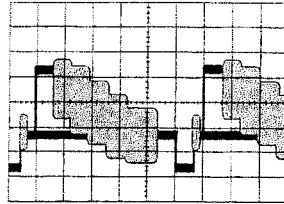


WAVEFORMS ON VIDEO CIRCUIT

1. WAVEFORMS IN THE EE MODE(COLOR BAR INPUT)

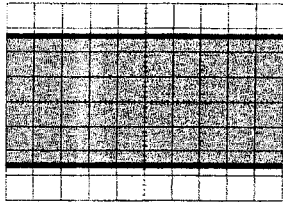


① Pin 30 of IC301
(PAL color bar input :
1.0Vp-p)

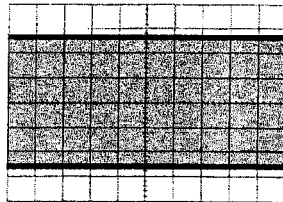


② Pin 52 of IC301
(PAL color bar output :
2.0Vp-p)

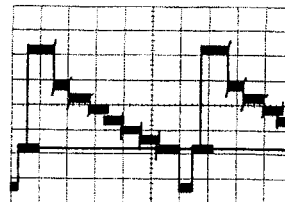
2. WAVEFORMS OF THE LUMINANCE IN THE RECORD MODE(COLOR BAR INPUT)



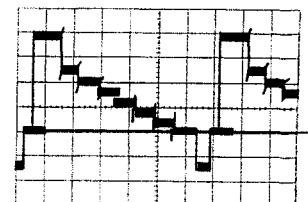
③ Pin 98 or 89 of IC301 (PAL)
(REC luminance :
300mVp-p)



④ Pin 98 of IC301 (SECAM)
(REC luminance :
300mVp-p)

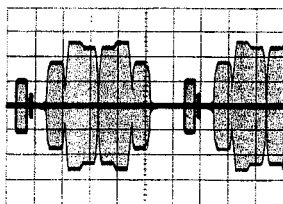


⑤ Pin 18 of IC301
(0.5Vp-p)

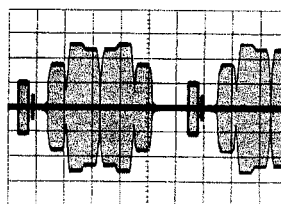


⑥ Pin 19 of IC301
(0.5Vp-p)

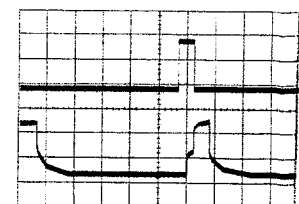
3. WAVEFORM OF THE PAL COLOR IN THE RECORD MODE(COLOR BAR INPUT)



⑦ Pin 60 of IC301
(300mVp-p)

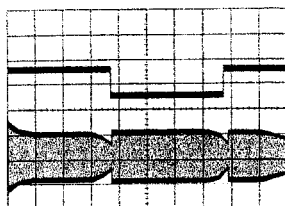


⑧ Pin 58 of IC301
(400mVp-p)

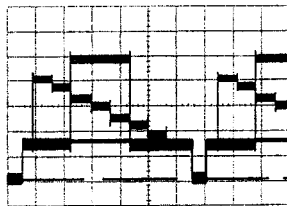


⑨ Pin 50 of IC301
(C.SYNC : 2Vp-p)

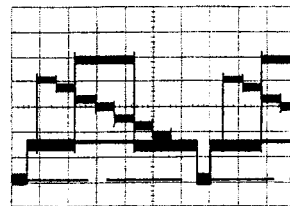
4. WAVEFORMS OF THE LUMINANCE IN THE PB MODE (DP-1 TEST TAPE)



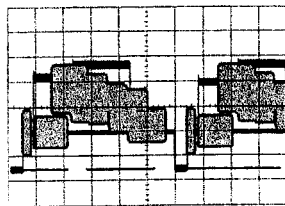
⑩ UP : Pin 81 of IC301(color rotary : 1Vp-p)
DOWN : Pin 79 of IC301 (ENVE : 0.5Vp-p)



⑪ Pin 18 of IC301 (0.5Vp-p)

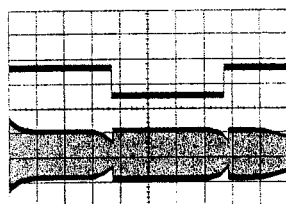


⑫ Pin 19 of IC301 (0.5Vp-p)

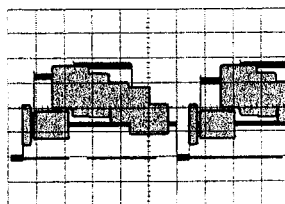


⑬ Pin 52 of IC301 (Video out : 2.0Vp-p)

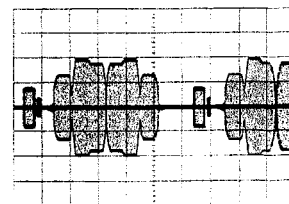
5. WAVEFORMS OF THE PAL COLOR IN THE PB MODE (DP-1 TEST TAPE)



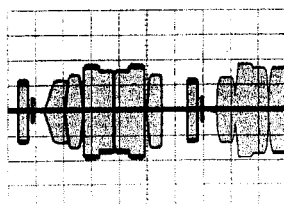
⑭ UP : Pin 81 of IC301(color rotary : 0.5Vp-p)
DOWN : Pin 74 of IC301 (500mVp-p)



⑮ Pin 52 of IC301 (Video out : 2.0Vp-p)



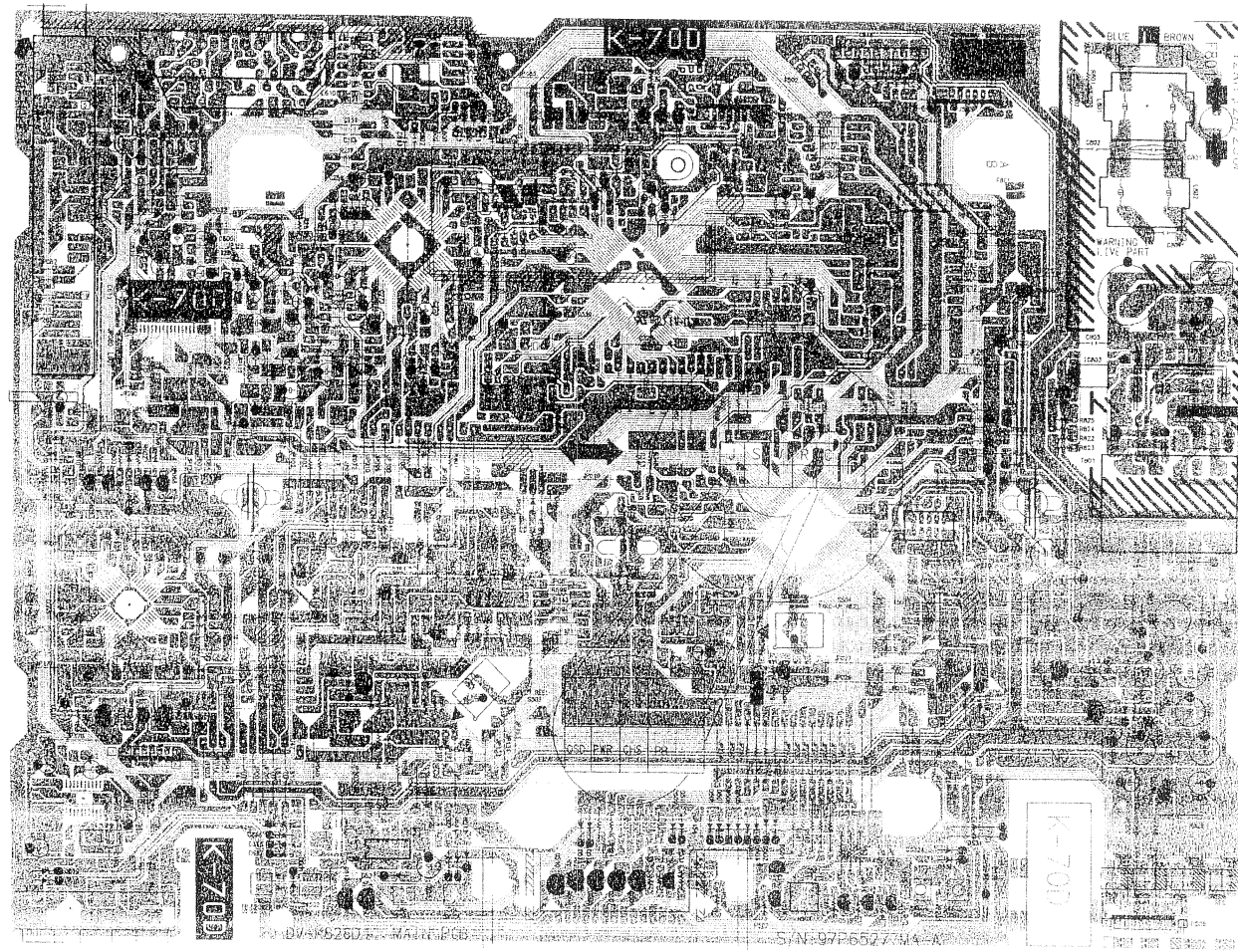
⑯ Pin 60 of IC301 (240mVp-p)



⑰ Pin 58 of IC301 (300mVp-p)

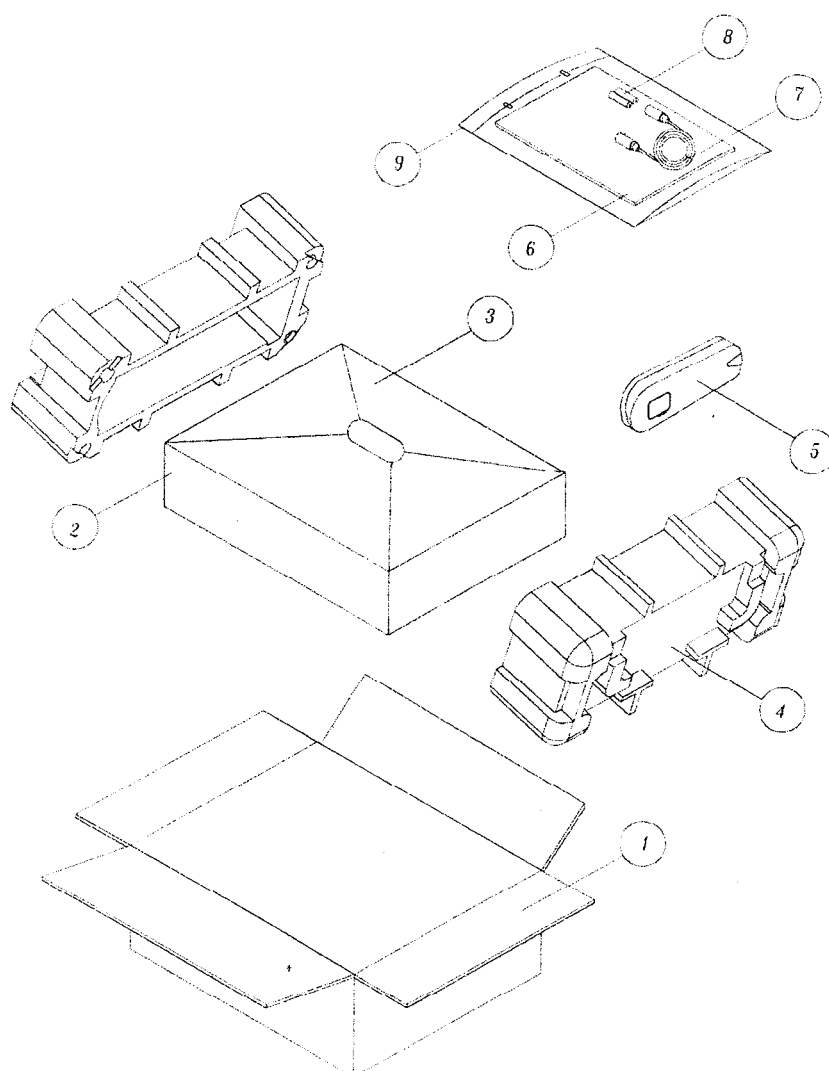
COMPONENTS LOCATION GUIDE ON PCB BOTTOM VIEW

1. PCB MAIN



DISASSEMBLY

1. PACKING ASSY

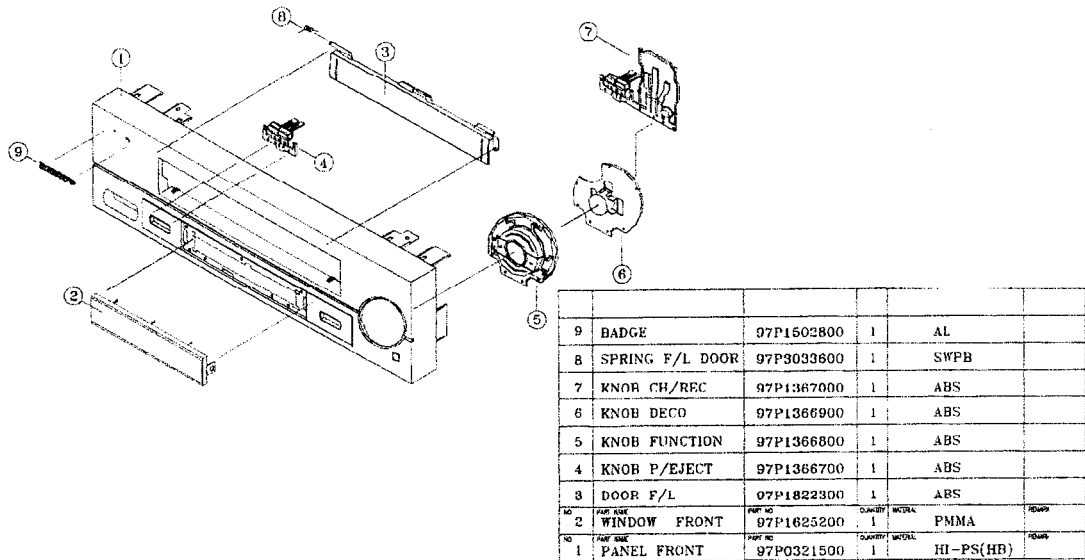


9	97P0424100	COVER ACCESSORY	1	LD-PE 10.1	
8	486A/16202	BATTERY	2	AAA 1.5V(DUPERGARD)	
7	97P890RP10	CABLE RF	1	PAL 1.1M	
6	97P9560000	MANUAL OWNERS	1	ALL MODEL	
5	97P1R20A00	REMOCOM HANDSET AS	1	VR-F204	
4	97P4927200	FOAM L/R	1	EPS	
3	97P4801300	POLY BAG FOR SET	1	PE-F04V	
2		SET TOTAL AS	1	DV-K828LY-AQ	
1	97P0043800	BOX CARTON	1	SW-4	
No.	PART No.	PART NAME	QTY	MATERIAL	REMARK

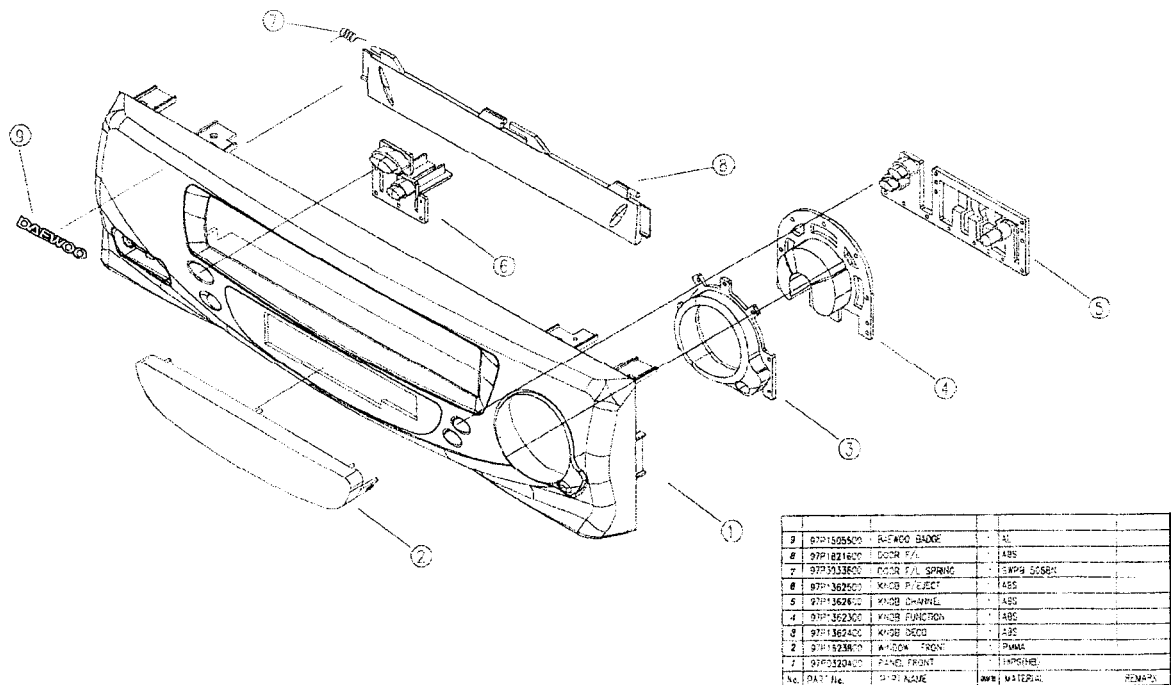
DISASSEMBLY

2. FRONT PANEL ASSEMBLY

DV-K816D SERIES

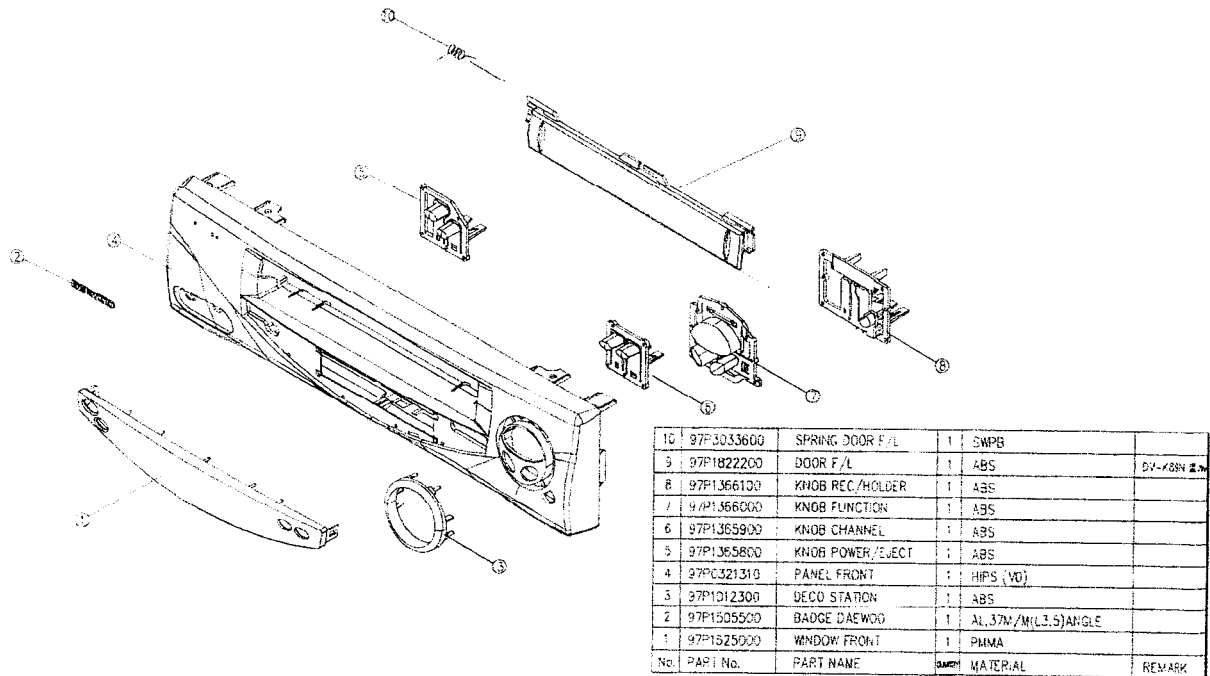


DV-K826D SERIES

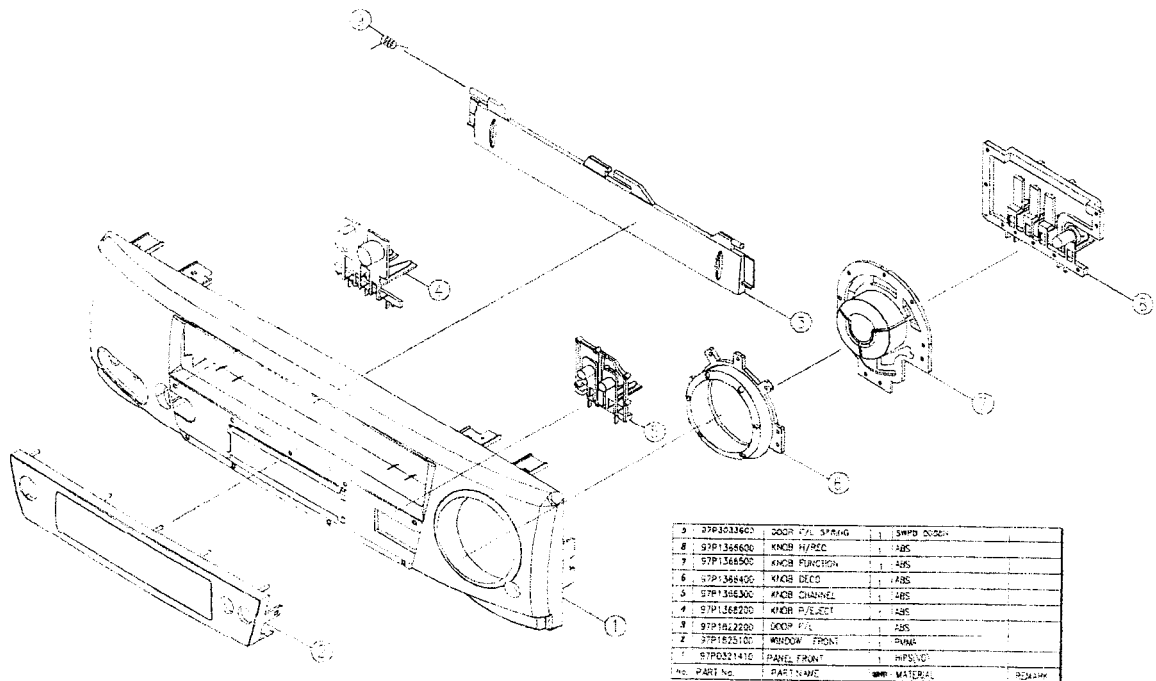


DISASSEMBLY

DV-K876D SERIES

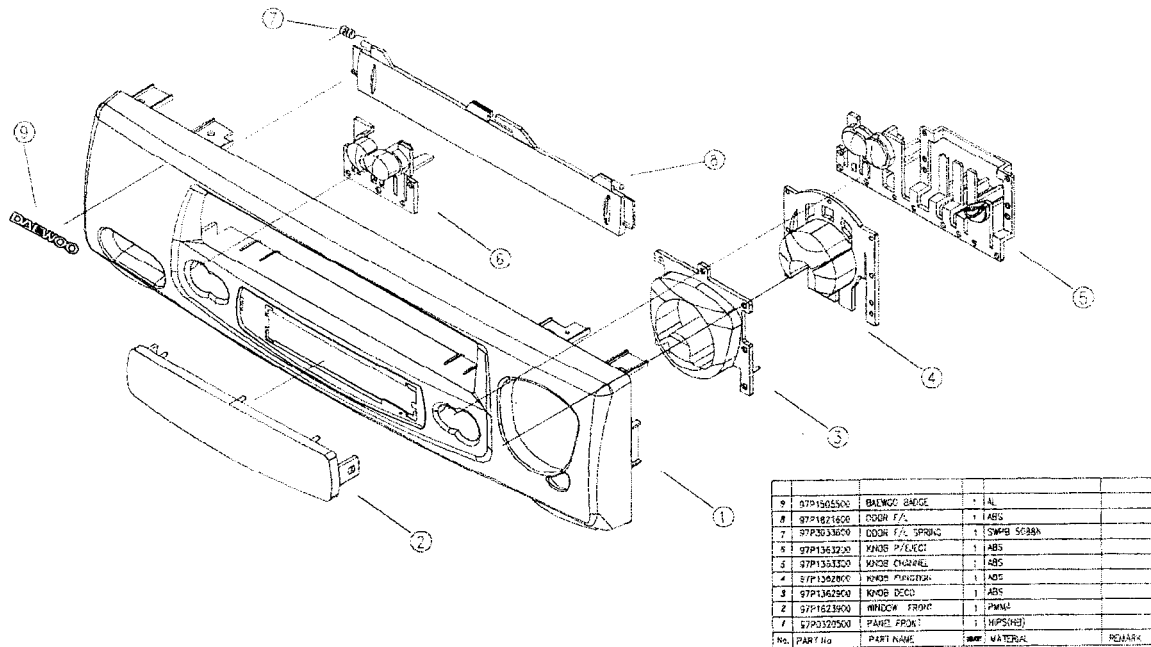


DV-K896D SERIES

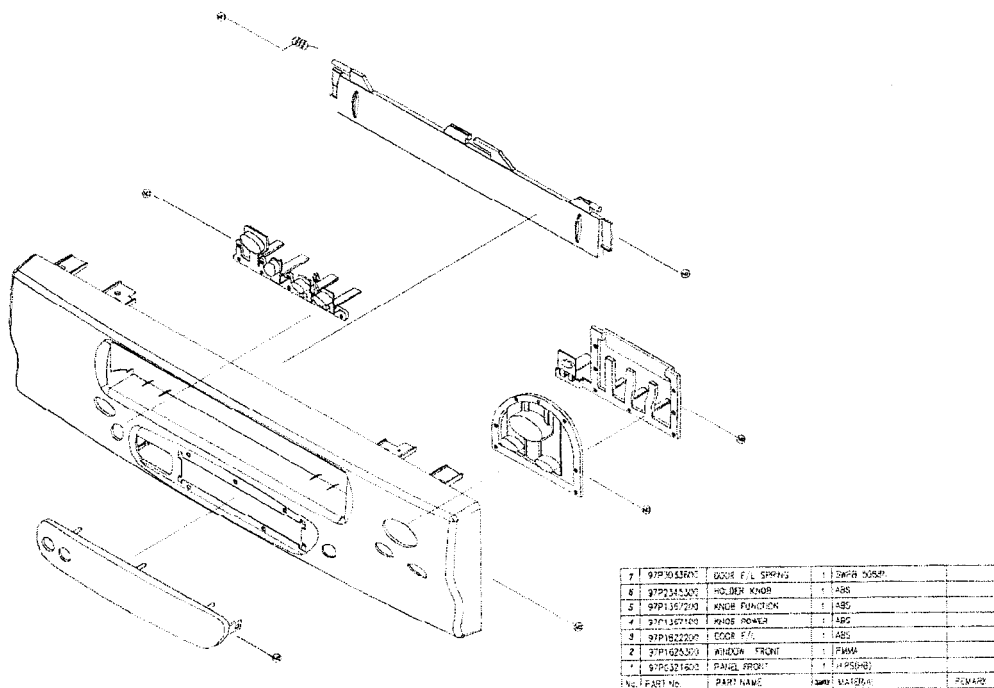


DISASSEMBLY

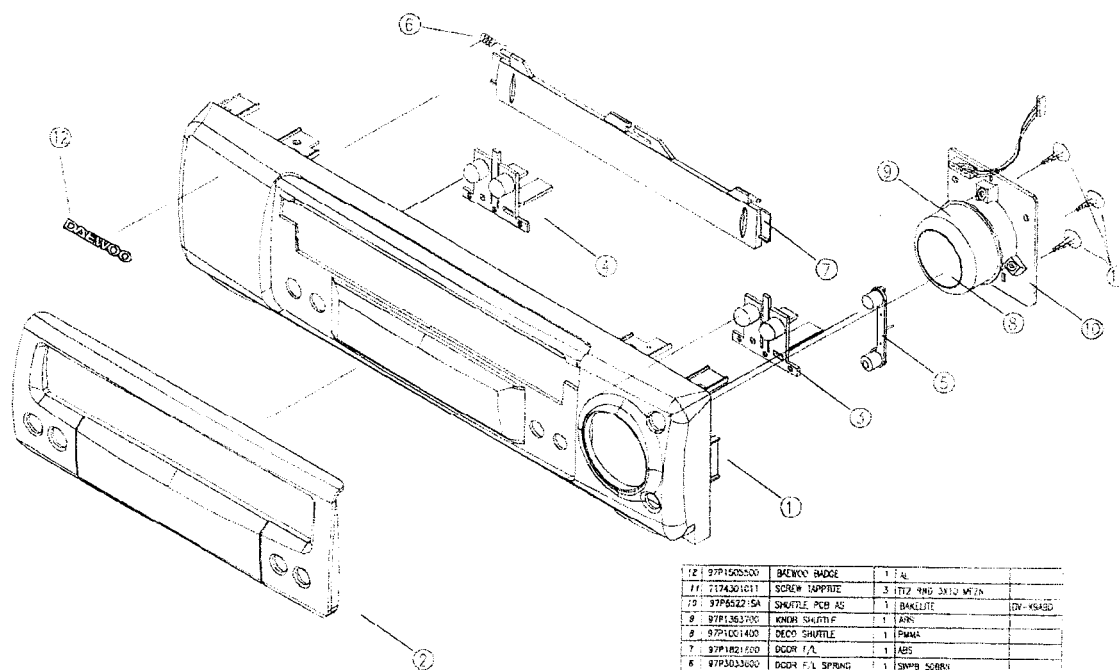
DV-K846D SERIES



DV-K866D SERIES



DV-K9A6D SERIES



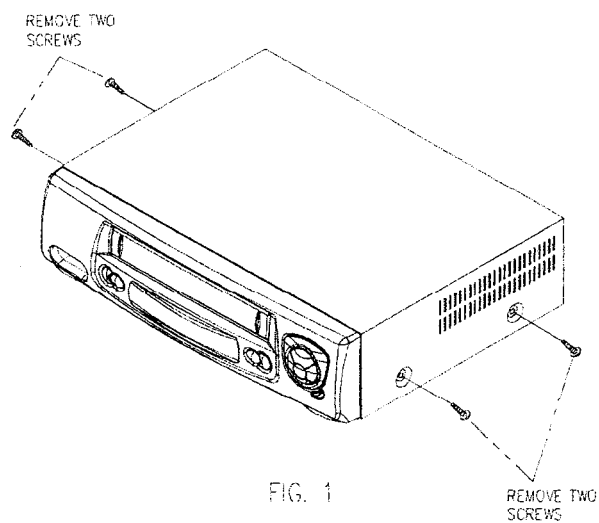
12	97P1500500	BACKWOOD BADGE	1	AL	
11	7174301611	SCREW TAPPIRUE	3	11/2 RING 3X12 M7X	
10	97P1502215A	SHUTTLE PCB AG	1	BAKELITE	OV-KRABO
9	97P1363200	KNOB SHUTTLE F	1	ABS	
8	97P1001400	DECO SHUTTLE	1	PMMA	
7	97P1801200	DOOR F/L	1	ABS	
6	97P1303200	DOOR F/L SPRING	1	SPRING SCREEN	
5	97P1363600	KNOB PLAY/REC	1	ABS	
4	97P1363400	KNOB F/E	1	ABS	
3	97P1364000	KNOB CH	1	ABS	
2	67P1074200	WINDOWN FRONT	1	PMMA	
1	97P0300800	PANEL FRONT	1	HPS(MB)	
No	PART No	PART NAME		MATERIAL	REMARK

DISASSEMBLY

3. INSTRUMENT DISASSEMBLY

3-1. TOP COVER REMOVAL (FIG.1)

- 1) Remove five (5) screws holding the top cover.
- 2) Carefully lift the back of the top cover and slide to the rear to remove.



3-2. FRONT PANEL REMOVAL (FIG.2)

- 1) Remove the top cover.
- 2) Release seven (7) tabs holding the front panel.
- 3) Remove the front panel.

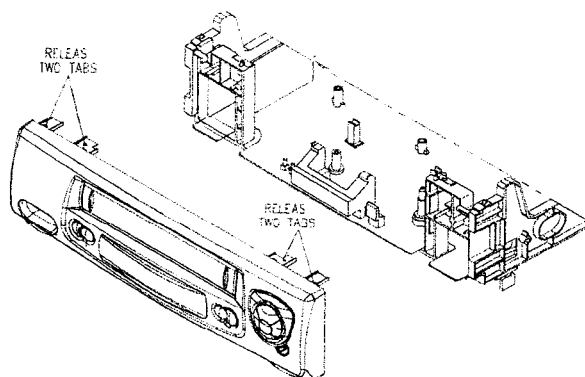


FIG. 2

DISASSEMBLY

3-3. BOTTOM COVER REMOVAL (FIG.3)

- 1) Remove the top cover and front panel.
- 2) Remove three (3) screws.
- 3) Release four (4) tabs and lift out the bottom cover.

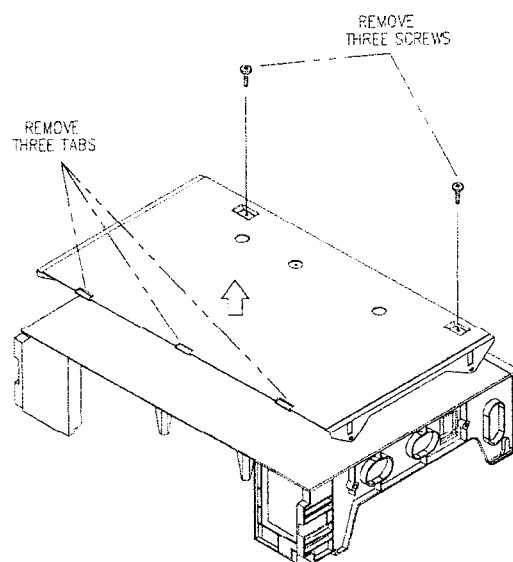


FIG. 3

3-4. F/L DOOR REMOVAL (FIG.4)

- 1) Open the F/L door 90°.
- 2) Remove the F/L door in the direction of arrow.

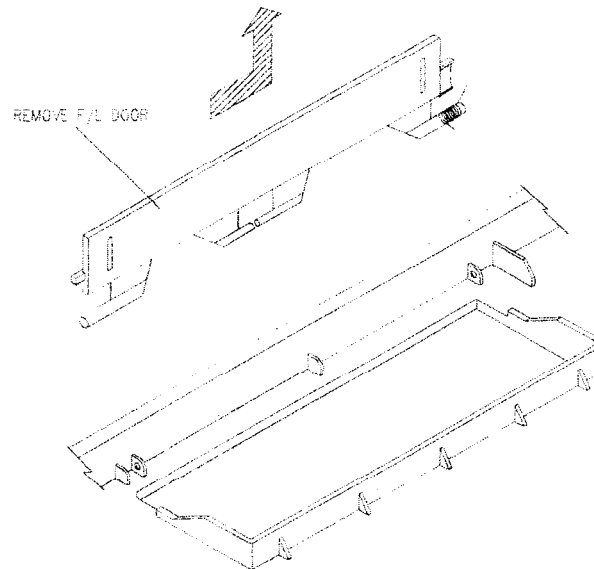


FIG. 4

DISASSEMBLY

3-5. COVER PRE-AMP / DECK AS REMOVAL (FIG.5)

- 1) Remove five (5) screws.
- 2) Disconnect the connector and FPC.
- 3) Pull out the DECK AS and COVER PRE-AMP in the direction of arrow.

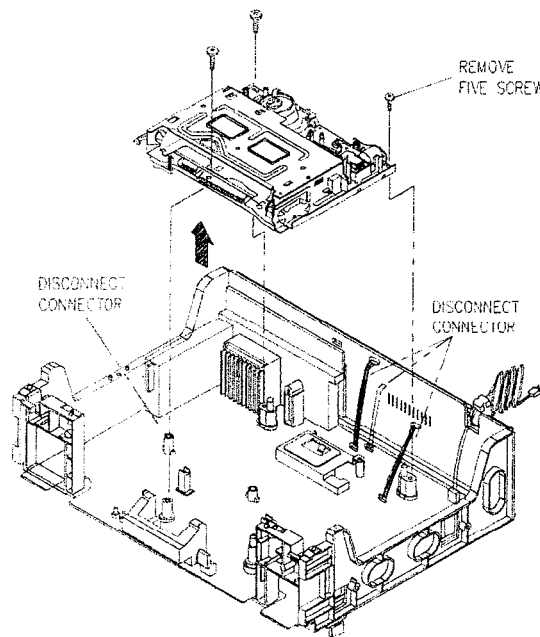
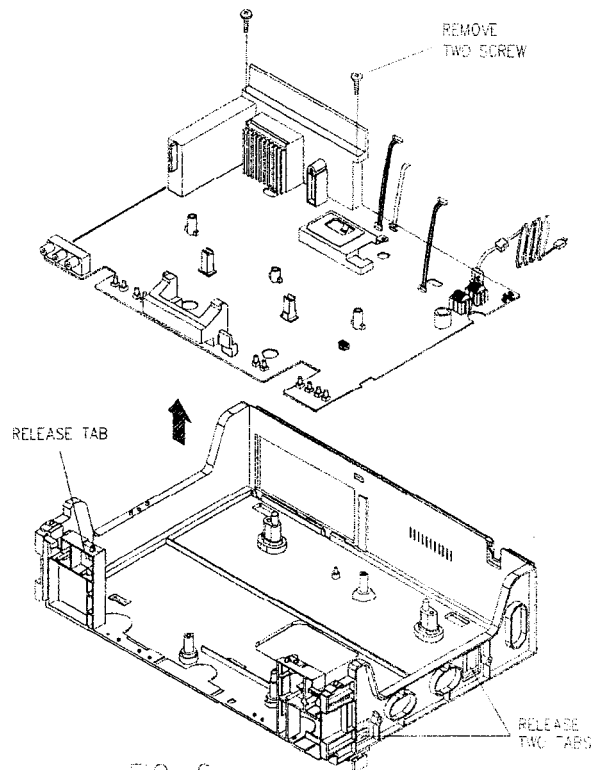


FIG. 5

3-6. PCB MAIN AS REMOVAL (FIG.6)

- 1) Remove two (2) screws.
- 2) Release three (3) tabs and lift out the main PCB in the direction of arrow.

**FIG. 6**

ELECTRICAL PARTS LIST

"R" is a recommendable part for stock.

1. PCB MAIN AS

LOC	PART-CODE	PART-NAME	PART-DESC	REMARK	LOC	PART-CODE	PART-NAME	PART-DESC	REMARK
1	PVACPSD340	ACCESSORY AS	F342DY(BT-AAA)		A1700	97SA310750	PINCH LEVER TOT AS	K-MECHA	R
D001	97P9560000	MANUAL OWNERS	ALL MODEL		B1710	97SA481050	PINCH ROLLER AS	D15(DAEJIN D2.6"D7*T4.5)	
D002	97P881RP10	CABLE RF	PAL 1.0M		A1800	97S3117300	WASHER POLY	D3.6XD8XT0.5	
D003	97P0424100	COVER ACCESSORY	LD-PE T0.1		A1900	97SA310400	L/C BRKT TOT AS	K-MECHA	R
D004	486A716202	BATTERY	AAA 1.5V(SUPERGARD)		B1910	97S8103600	L/C MOTOR	MDH2B70	
2	PVPKCPD619	PACKING AS	K2A9DY-AQ(D579-C)		B1940	55SF1DKM10	SW CAM	MMS00320ZMBO	
C001	97P4927600	PAD FRONT/BACK	EPS		A1901	7274300611	SCREW TAPPTITE	TT3 RND 3X6 MFZN	
C002	97P4808500	POLY BAG FOR SET	800*800*T0.5		A2100	97SA311600	IDLER PLATE AS	K-MECHA	
C003	97P5043800	BOX CARTON	SW-4		A2200	97S3108200	POLYWASHER	D2.6XD6.0XT0.5	
C004	47P4502201	LABEL SERIAL A	ART PAPER 2EA ALL MODEL		A2300	97S2901600	TABLE REEL	F20 BLACK	R
C005	6520010020	STAPPLE	M20		A2400	97S3903600	POLY SLIDER	D3.1XD6XT0.5	
3	PVMCASD886	CHASSIS MAIN AS	DV-K826DY-AQ		A2500	97SA310800	TENSION BAND AS	K-MECHA	R
A001	97P0610600	CHASSIS MAIN	HI-PS(HB)		A2600	97S3003500	SPG TENSION	SWPB D0.4	
A0011	97P0800600	LEG	SBR 80 BLK		A2700	97SA309300	S SUB BRAKE AS	K-MECHA	
A002	97P9340000	LABEL SPEC	PE FILM (EU MODEL)		A2800	97SA309400	T SUB BRAKE AS	K-MECHA	
A015	97P4218700	CUSHION F/L	20*15*7.5T EVA		A2900	97SA309110	MAIN BRAKE AS	K-MECHA	
A040	97P0478401	COVER TOP	BK611C		A3100	97S8012900	HEAD FE	HV/FHF0004AK(LG)	
A041	7173401212	SCREW TAPPTITE	TT2 BIN 4X12 BK		A3101	97S3102100	SCREW TAPPTITE	TT2 BIN-P 2.6X10 MFZN	
A060	97P0474100	COVER BOTTOM	SECC T0.4		A3300	97SA309000	REEL GEAR TOT AS	K-MECHA	
A061	7174301211	SCREW TAPPTITE	TT2 RND 3X12 MFZN		A3400	97S3108200	POLYWASHER	D2.6XD6.0XT0.5	
D100	97P1R2GHA0	REMOCON HANDSET AS	VR-F2GH		A3500	97S5500400	BELT REEL	CR68	
M01	97PP320400	PANEL FRONT AS	DV-K829DY		A3600	97S2625500	LEVER REC SAFETY	F20-03 SKY BLUE	
M01A	97P9359900	LABEL STICKER	HOLOGRAM SHEET		A4100	2291129004	OIL LUBRICANT	OA-305P	
M021	7173401211	SCREW TAPPTITE	TT2 BIN 4X12 MFZN		A4200	2291131304	GREASE	DELUXE 5221G(NAM-YOUNG)	
M022	7174301211	SCREW TAPPTITE	TT2 RND 3X12 MFZN		PW01	97P69DB900	CORD POWER AS	EUROPEAN	
M1000	PVDKARP96H	VCR DECK AS	DRP-9620N(C0312D-)		P502A	97P88F0714	CABLE FFC	1.25K 7P 140MM	
AD001	97PA272771	DRUM PRICE AS	CYP-KT612G		Z001	PVMPMSD886	PCB MAIN MANUAL AS	DV-K826DY-AQ	
A002	7274301011	SCREW TAPPTITE	TT3 RND 3X10 MFZN		AM01	2193102005	SOLDER BAR	SN-PB-63.37 S63S-1320	
AF001	97SA251400	F/L AS	K-MECHA	R	AM02	2193011100	SOLDER WIRE	60 SNA 1.2D	
AF002	7274300611	SCREW TAPPTITE	TT3 RND 1X6 MFZN		AM03	2291050305	FLUX LIQUID	RF-800KN	
A0010	97SA309700	MAIN BASE AS	K-MECHA		AM04	2291050306	FLUX THINNER	RF-800ADD	
A011	97P93B2102	LABEL CD(DECK)	PAPER(13X56) ALL MODEL		AM05	2291140501	WAX COVER	DS-102AN	
A0200	97S0901400	PLATE CONNECT	SECC T1.0		AM06	97P93B2101	LABEL CD(PCB)	PAPER(13X48) ALL MODEL	
A0300	97S2701800	RACK F/L	PBT (KP213G33) NATURAL	R	B001	97P0720400	BOARD ANT	HI-PS(HB)	
A0400	97SA310900	S SLANT POLE AS	G.FM K-MECHA	R	B001A	7175300812	SCREW TAPPTITE	TT2 FLT 3X8 MFZN BK	
A0500	97SA311000	T SLANT POLE AS	G.FM K-MECHA	R	C801	CH1EE3104M	C LINE ACROSS	AC275V 0.1MF M PCX2 335 W	
A0600	97SA308500	L LOADING AS	K-MECHA		C802	CH1TFB131K	C CERA AC	4.0KV 100PF K AD AC250V	
A0700	97SA308600	R LOADING AS	K-MECHA		C803	CH1TFE222M	C CERA AC	4.0KV 2200PF M AD AC250V	
A0800	97SA308400	LOADING RACK AS	K-MECHA		C804	CH1CEE472M	C CERA AC	2.5KV 4700PF M DE AC250V	
A0900	97S3101800	WASHER POLY	D3.1XD8XT0.5		C805	CEXF2G473V	C ELECTRO	400V RSS 47MF 15X25	R
A1000	97S8100700	MOTOR CAPSTAN	F30TB10	R	C808	CBXB3A101J	C CERA SEMI	1KV KR 100PF J	
A1001	97S3102920	SCREW TAPPTITE	TT2 RND 3X12 MFZN		C822	CEXK1E681L	C ELECTRO	25V 680UF KXL	
A1200	97S3004000	SPG AC HEAD	SUS304WPS D1.2		C823	CEXK1E681L	C ELECTRO	25V 680UF KXL	
A1300	97SA311200	AC HEAD AS	K-MECHA LG	R	D524	DS1R481T--	LED IR	SIR-481TP-RANK	R
B1310	97S8020800	HEAD A/C	HV/MXB1310AK LG		D524A	97P2334200	HOLDER LED SENSOR	F.O.M	
A1301	7391300211	NUT HEX	6M-1.5 MFZN		D822	D32L200--F	DIODE	S2L20U 400A P15	
A1500	97S2634100	LEVER RELAY	ZDC-2		D824	D31DQ06--F	DIODE SCHOTTKY	31DQ06-FC5	
A1600	97S2701400	GEAR CAM	DELIN 600 NATURAL		H501	1TSJP2238W	IC UNIT R/RECEIVER	TSJP2238W/E1	R

ELECTRICAL PARTS LIST

LOC	PART-CODE	PART-NAME	PART-DESC	REMARK	LOC	PART-CODE	PART-NAME	PART-DESC	REMARK
H502	DK829D---	LED DISPLAY	K829D-ODM-H022-HIFI	R	C239	HCLK331JCA	C CHIP CERA	50V SL 330PF J 2012	
IC502	1KA3082---	IC DRIVER	KA3082B	R	C255	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
IC803	1PC-17L1BB	IC PHOTO COUPLER	PC-17L1BB CTR100-200		C258	HCBK472KCA	C CHIP CERA	50V X7R 4700PF K 2012	
JK601	97P6313300	JACK DOUBLE SCART	DSAM-9621		C259	HCBK332KCA	C CHIP CERA	50V X7R 3300PF K 2012	
JK605	97P6314900	JACK PIN	DPAM-9625		C260	HCLK561JCA	C CHIP CERA	50V SL 560PF J 2012	
JK606	97P6316000	JACK PIN	DPAE-9930		C264	HCBK332KCA	C CHIP CERA	50V X7R 3300PF K 2012	
L801	5PLFSF212A	FILTER LINE	SF-2120A		C265	HCBK472KCA	C CHIP CERA	50V X7R 4700PF K 2012	
L802	5PLFSF212A	FILTER LINE	SF-2120A		C267	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
M401	97P0474200	CASE SHIELD PREAMP	ET T0.4		C272	HCLK391JCA	C CHIP CERA	50V SL 390PF J 2012	
M801	97P0974300	PLATE EARTH-P	ET T=0.4		C282	HCLK331JCA	C CHIP CERA	50V SL 330PF J 2012	
PJ201	97P885X100	CONN AS	6H/2H-8S 140/350(TUBE)MM		C283	HCLK331JCA	C CHIP CERA	50V SL 330PF J 2012	
PJ503	97P8810712	CONN AS (Y10712)	7H-7S, 120MM		C303	HCLK151JCA	C CHIP CERA	50V SL 150PF J 2012	
P401	97P62G06DA	CONN HOUSING	GF120 FPC 1.25MM 10P		C304	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
P501	97P62J012A	CONN B/B	JE612 PLUG 2.0 10P		C305	HCLK560JCA	C CHIP CERA	50V SL 56PF J 2012	
P502	97P62G06D7	CONN HOUSING	GF120 FPC 1.25MM 7P		C307	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
P504	97P6269100	CONN WAFER	00-8283-0712-00000		C308	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
P801	97P62Y02X2	CONN WAFER	YFW800 STR 10MM 2P		C310	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
Q801	TKSC5027FR	TR	KSC5027FR	R	C311	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
RF101	97P7614000	TUNER 3 IN 1	SSTMI-BGQ2-S	R	C314	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
R593	RS02F100JS	R M-OXIDE FILM	2W 10 OHM J SMALL	R	C318	HCLK221JCA	C CHIP CERA	50V SL 220PF J 2012	
R803	RW02B229J-	R WIRE WOUND	2W 2.2 OHM J		C320	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
R808	RS02F104JS	R M-OXIDE FILM	2W 100K OHM J SMALL		C331	HCBK223KCA	C CHIP CERA	50V X7R 0.022MF K 2012	
R826	RS01F821J-	R M-OXIDE FILM	1W 820 OHM J		C333	HCQK309CCA	C CHIP CERA	50V CH 3PF C 2012	
SW501	5S70101059	SW DETECTOR	SPPB62		C335	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
S501	TST5811---	TR PHOTO	ST-5811(D-RANK)	R	C343	HCQK131JCA	C CHIP CERA	50V CH 130PF J 2012	
S501A	97P2343500	HOLDER TR	ABS		C345	HCLK561JCA	C CHIP CERA	50V SL 560PF J 2012	
S502	TST5811---	TR PHOTO	ST-5811(D-RANK)		C353	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
S502A	97P2343500	HOLDER TR	ABS		C401	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
S503	97P0S01900	SENSOR REEL	SG-258S	R	C402	HCFK333ZCA	C CHIP CERA	50V Y5V 0.033MF Z 2012	
S504	97P0S01900	SENSOR REEL	SG-258S		C414	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
T201	560202L697	COIL OSC	DEO-010(BIA3)	R	C508	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012	
T801	57M8282215	TRANS SMPS	TSW-K821D	R	C507	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
X051	5XJ18R4LAE	CRYSTAL QUARTZ	HC-49/S 18.43200MHZ 30PP	R	C509	HCBK223KCA	C CHIP CERA	50V X7R 2200PF K 2012	
X501	5XJ16R0LAE	CRYSTAL QUARTZ	HC-49/S 16.00000MHZ 30PPM		C510	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
X503	5XJ17R7LAD	CRYSTAL QUARTZ	HC-49/S 17.73447MHZ 25PPM		C513	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
11	PVMPJ1D886	PCB MAIN CHIP AS	DV-K826DY-AQ		C514	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
C007	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012		C516	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
C008	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012		C527	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
C014	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012		C528	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
C051	HCQK390JCA	C CHIP CERA	50V CH 39PF J 2012		C529	HRFT000-CA	R CHIP	1/10 0 OHM 2012	
C052	HCQK209CCA	C CHIP CERA	50V CH 2PF C 2012		C531	HCQK100DCA	C CHIP CERA	50V CH 10PF D 2012	
C053	HCQK209CCA	C CHIP CERA	50V CH 2PF C 2012		C532	HCQK120JCA	C CHIP CERA	50V CH 12PF J 2012	
C056	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		C533	HCQK120JCA	C CHIP CERA	50V CH 12PF J 2012	
C058	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		C534	HCQK100DCA	C CHIP CERA	50V CH 10PF D 2012	
C153	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012		C545	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
C157	HCBK563KCA	C CHIP CERA	50V X7R 0.056MF K 2012		C547	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
C159	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012		C548	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
C161	HCQK220JCA	C CHIP CERA	50V CH 22PF J 2012		C555	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
C207	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012		C558	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
C203	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012		C559	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
C205	HCBK332KCA	C CHIP CERA	50V X7R 3300PF K 2012		C562	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
C207	HCBK152KCA	C CHIP CERA	50V X7R 1500PF K 2012		C563	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
C212	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		C564	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
C218	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012		C612	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
C224	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		C615	HCLK331JCA	C CHIP CERA	50V SL 330PF J 2012	

ELECTRICAL PARTS LIST

LOC	PART-CODE	PART-NAME	PART-DESC	REMARK	LOC	PART-CODE	PART-NAME	PART-DESC	REMARK
C616	HCBK223KCA	C CHIP CERA	50V X7R 0.022MF K 2012		RJ94	HRFT000-CA	R CHIP	1/10 0 OHM 2012	
C625	HCLK331JCA	C CHIP CERA	50V SL 330PF J 2012		RJ98	HRFT000-CA	R CHIP	1/10 0 OHM 2012	
C628	HCBK223KCA	C CHIP CERA	50V X7R 0.022MF K 2012		R012	HRFT150JCA	R CHIP	1/10 15 OHM J 2012	
C630	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012		R158	HRFT222JCA	R CHIP	1/10 2.2K OHM J 2012	
C631	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012		R152	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	
C632	HQCK330JCA	C CHIP CERA	50V CH 33PF J 2012		R153	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012	
C633	HQCK330JCA	C CHIP CERA	50V CH 33PF J 2012		R154	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	
C634	HQCK330JCA	C CHIP CERA	50V CH 33PF J 2012		R155	HRFT182JCA	R CHIP	1/10 1.8K OHM J 2012	
C635	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012		R202	HRFT334JCA	R CHIP	1/10 330K OHM J 2012	
C640	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012		R203	HRFT133JCA	R CHIP	1/10 13K OHM J 2012	
C810	HCBK472KCA	C CHIP CERA	50V X7R 4700PF K 2012		R204	HRFT151JCA	R CHIP	1/10 150 OHM J 2012	
C811	HCBK473KCA	C CHIP CERA	50V X7R 0.047MF K 2012		R205	HRFT273JCA	R CHIP	1/10 27K OHM J 2012	
C812	HCBK473KCA	C CHIP CERA	50V X7R 0.047MF K 2012		R209	HRFT821JCA	R CHIP	1/10 820 OHM J 2012	
C825	HCBK683KCA	C CHIP CERA	50V X7R 0.068MF K 2012		R210	HRFT272JCA	R CHIP	1/10 2.7K OHM J 2012	
D801	DS1WBA60-C	DIODE BRIDGE	S1WBA60 4072 CHIP	R	R211	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	
IC051	1MSP3407DQ	IC A2	MSP3407D-QG	R	R212	HRFT512JCA	R CHIP	1/10 5.1K OHM J 2012	
IC151	1LC74793-	IC VPS(PDC)	LC74793	R	R213	HRFT229JCA	R CHIP	1/10 2.2 OHM J 2012	
IC251	1LA72637M-	IC HI-FI	LA72637M	R	R214	HRFT229JCA	R CHIP	1/10 2.2 OHM J 2012	
IC301	1HA118517F	IC SUPER AV	HA118517F	R	R215	HRFT152JCA	R CHIP	1/10 1.5K OHM J 2012	
IC501	168KK736TS	IC MICOM	M37760M8H-1B0GP	R	R219	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
IC503	14CAT2416J	IC EEPROM	CAT24WC16J(16K SOP)	R	R220	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	
IC601	1MM1443XJ-	IC AV SW	MM143XJ	R	R243	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	
L697	HLX1210001	BEAD CHIP	TB201209Z121	R	R249	HRFT153JCA	R CHIP	1/10 15K OHM J 2012	
L698	HLX1210001	BEAD CHIP	TB201209Z121		R253	HRFT470JCA	R CHIP	1/10 47 OHM J 2012	
L611	HLX1210001	BEAD CHIP	TB201209Z121		R254	HRFT202JCA	R CHIP	1/10 2K OHM J 2012	
Q301	T2SC2412KB	TR CHIP	2SC2412K-T146-BR		R255	HRFT564JCA	R CHIP	1/10 560K OHM J 2012	
Q305	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	R	R257	HRFT163JCA	R CHIP	1/10 16K OHM J 2012	
Q330	T2SA1037KB	TR CHIP	2SA1037K-T146-R		R260	HRFT823JCA	R CHIP	1/10 82K OHM J 2012	
Q331	T2SC2412KB	TR CHIP	2SC2412K-T146-BR		R262	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012	
Q518	T2SC2412KB	TR CHIP	2SC2412K-T146-BR		R264	HRFT242JCA	R CHIP	1/10 2.4K OHM J 2012	
Q520	T2SC2412KB	TR CHIP	2SC2412K-T146-BR		R266	HRFT242JCA	R CHIP	1/10 2.4K OHM J 2012	
RJ01	HRF8000-EA	R CHIP	1/8 0 OHM 3216		R267	HRFT823JCA	R CHIP	1/10 82K OHM J 2012	
RJ02	HRF8000-EA	R CHIP	1/8 0 OHM 3216		R269	HRFT163JCA	R CHIP	1/10 16K OHM J 2012	
RJ10	HRF8000-EA	R CHIP	1/8 0 OHM 3216		R302	HRFT202JCA	R CHIP	1/10 2K OHM J 2012	
RJ11	HRF8000-EA	R CHIP	1/8 0 OHM 3216		R309	HRFT273JCA	R CHIP	1/10 27K OHM J 2012	
RJ12	HRF8000-EA	R CHIP	1/8 0 OHM 3216		R310	HRFT431JCA	R CHIP	1/10 430 OHM J 2012	
RJ13	HRF8000-EA	R CHIP	1/8 0 OHM 3216		R314	HRFT202JCA	R CHIP	1/10 2K OHM J 2012	
RJ23	HRF8000-EA	R CHIP	1/8 0 OHM 3216		R315	HRFT105JCA	R CHIP	1/10 1M OHM J 2012	
RJ24	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R316	HRFT471JCA	R CHIP	1/10 470 OHM J 2012	
RJ27	HRF8000-EA	R CHIP	1/8 0 OHM 3216		R349	HRFT431JCA	R CHIP	1/10 430 OHM J 2012	
RJ28	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R350	HRF1271JCA	R CHIP	1/10 270 OHM J 2012	
RJ29	HRFT000-CA	R CHIP	1/10 0 OHM 2012		RS45	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	
RJ32	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R5B3	HRFT303JCA	R CHIP	1/10 30K OHM J 2012	
RJ35	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R504	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	
RJ36	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R507	HRFT332JCA	R CHIP	1/10 3.3K OHM J 2012	
RJ37	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R514	HRFT304JCA	R CHIP	1/10 300K OHM J 2012	
RJ47	HRF8000-EA	R CHIP	1/8 0 OHM 3216		R517	HRFT473JCA	R CHIP	1/10 47K OHM J 2012	
RJ50	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R549	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RJ83	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R550	HRFT182JCA	R CHIP	1/10 1.8K OHM J 2012	
RJ84	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R551	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RJ85	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R552	HRFT561JCA	R CHIP	1/10 560 OHM J 2012	
RJ86	HRF1000-CA	R CHIP	1/10 0 OHM 2012		R557	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RJ87	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R558	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012	
RJ89	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R560	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RJ93	HRFT000-CA	R CHIP	1/10 0 OHM 2012		R561	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	

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LOC	PART-CODE	PART-NAME	PART-DESC	REMARK	LOC	PART-CODE	PART-NAME	PART-DESC	REMARK
R563	HRFT273JCA	R CHIP	1/10 27K OHM J 2012		C263	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7	
R565	HRFT201JCA	R CHIP	1/10 200 OHM J 2012		C266	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)	
R568	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		C268	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
R572	HRFT103JCA	R CHIP	1/10 10K OHM J 2012		C269	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7	
R583	HRFT332JCA	R CHIP	1/10 3.3K OHM J 2012		C270	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
R587	HRFT103JCA	R CHIP	1/10 10K OHM J 2012		C273	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7	
R588	HRFT201JCA	R CHIP	1/10 200 OHM J 2012		C274	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7	
R594	HRFT104JCA	R CHIP	1/10 100K OHM J 2012		C275	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7	
R605	HRFT512JCA	R CHIP	1/10 5.1K OHM J 2012		C276	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7	
R606	HRFT750JCA	R CHIP	1/10 75 OHM J 2012		C278	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
R611	HRFT750JCA	R CHIP	1/10 75 OHM J 2012		C279	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
R613	HRFT750JCA	R CHIP	1/10 75 OHM J 2012		C280	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7	
R617	HRFT151JCA	R CHIP	1/10 150 OHM J 2012		C301	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
R618	HRFT750JCA	R CHIP	1/10 75 OHM J 2012		C306	CEXF1H104Z	C CERA SEMI	50V F 0.1MF 2 (TAPPING)	
R619	HRFT750JCA	R CHIP	1/10 75 OHM J 2012		C309	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7	
12	PVMPJRD886	PCB MAIN RADIAL AS	DV-K826DY-AQ		C312	CEXF1H339A	C ELECTRO	50V RSM 3.3MF 4X7	
C001	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C313	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7	
C004	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7		C315	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
C013	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP		C316	CEXF1H109F	C ELECTRO	50V RMB 1MF 4'7	
C015	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP		C317	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
C016	CEXF1H478A	C ELECTRO	50V RSM 0.47MF 4X7		C319	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C017	CCXB1H332K	C CERA	50V B 3300PF K (TAPPING)		C326	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C018	CCXB1H332K	C CERA	50V B 3300PF K (TAPPING)		C332	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
C055	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C334	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
C057	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C336	CCXF1H223Z	C CERA	50V F 0.022MF 2 (TAPPING)	
C059	CEXF1H339A	C ELECTRO	50V RSM 3.3MF 4X7		C337	CEXF1H478A	C ELECTRO	50V RSM 0.47MF 4X7	
C061	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C338	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP	
C063	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP		C339	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
C064	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C403	CEXF1H339A	C ELECTRO	50V RSM 3.3MF 4X7	
C065	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C413	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C066	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C415	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7	
C151	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP		C502	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C152	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP		C503	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP	
C154	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP		C505	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP	
C158	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7		C508	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C201	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP		C511	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C204	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C512	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP	
C206	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)		C515	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C208	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7		C523	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7	
C209	CMXM2A333J	C MYLAR	100V 0.033MF J (TP)		C525	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C210	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP		C540	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C214	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)		C544	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C215	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7		C549	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
C216	CMXM2A153J	C MYLAR	100V 0.015MF J (TP)		C601	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
C217	CMXM2A333J	C MYLAR	100V 0.033MF J (TP)		C602	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
C219	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP		C603	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
C220	CCXB2H221K	C CERA	500V B 220PF K (TAPPING)		C604	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
C221	CMXM2A223J	C MYLAR	100V 0.022MF J TP		C605	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
C251	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C608	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7	
C252	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP		C609	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7	
C253	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		C610	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7	
C254	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7		C611	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C256	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)		C618	CEXF1A471V	C ELECTRO	10V RSS 470MF 8X11.5	
C257	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)		C619	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7	
C262	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP		C620	CEXF1A471V	C ELECTRO	10V RSS 470MF 8X11.5	

ELECTRICAL PARTS LIST

LOC	PART-CODE	PART-NAME	PART-DESC	REMARK	LOC	PART-CODE	PART-NAME	PART-DESC	REMARK
C622	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)		Q309	TZTA1266Y-	TR	KTA1266Y-(AUTO)(1015Y)	
C650	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		Q505	TZRC102M--	TR	KRC102M(KEC)	
C651	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7		Q506	TZTC3203Y-	TR	KTC3203Y (2120Y)	
C652	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP		Q507	TZTC3203Y-	TR	KTC3203Y (2120Y)	
C653	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)		Q508	TZTC3203Y-	TR	KTC3203Y (2120Y)	
C654	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)		Q509	TZTC3203Y-	TR	KTC3203Y (2120Y)	
C655	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)		Q510	TZTC3203Y-	TR	KTC3203Y (2120Y)	
C656	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)		Q511	TZTC3203Y-	TR	KTC3203Y (2120Y)	
C657	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP		Q512	TZTC3203Y-	TR	KTC3203Y (2120Y)	
C658	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP		Q513	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)	
C806	CEXF2C109V	C ELECTRO	160V RSS 1MF (6.3X11) TP		Q514	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)	
C809	CMXL2G333K	C MYLAR	400V MEU 0.033MF K		Q515	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)	
C824	CEXK1J220L	C ELECTRO	63V 22UF KXL		Q516	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)	
C826	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP		Q517	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)	
C828	CEXF1E221V	C ELECTRO	25V RSS 220MF (8X11.5) TP		Q519	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)	
C829	CEXF1E221V	C ELECTRO	25V RSS 220MF (8X11.5) TP		Q521	TZTA1266Y-	TR	KTA1266Y-(AUTO)(1015Y)	
C830	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP		Q601	TZSR2001--	TR	KSR2001 (AUTO)	
C831	CEXF1A471V	C ELECTRO	10V RSS 470MF 8X11.5		Q602	TZRC104M--	TR	KRC104M AUTO	
C833	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP		Q603	TZRC104M--	TR	KRC104M AUTO	
C834	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP		Q604	TZRC102M--	TR	KRC102M(KEC)	
C835	CEXF1A471V	C ELECTRO	10V RSS 470MF 8X11.5		Q802	TZTC3203Y-	TR	KTC3203Y (2120Y)	
C836	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP		Q821	TZTC3205Y-	TR	KTC3205Y (2236Y)	
F801	5FSPS2022L	FUSE PLASTIC TUBE	SEMKO 2A 250V TL(ETF2AP)	#	Q823	TZTC3205Y-	TR	KTC3205Y (2236Y)	
IC504	1K1A7042AP	IC REGULATOR	KIA7042AP	#	Q824	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)	
IC802	1KA431AZ--	IC REGULATOR	KA431AZ		Q825	TZTC3205Y-	TR	KTC3205Y (2236Y)	
L001	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		SW502	5S50101Z97	SW TACT	THVV952GBA 9.5M AUTO	
L002	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		SW503	5S50101Z97	SW TACT	THVV952GBA 9.5M AUTO	
L051	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)		SW504	5S50101Z97	SW TACT	THVV952GBA 9.5M AUTO	
L052	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)		SW505	5S50101Z97	SW TACT	THVV952GBA 9.5M AUTO	
L053	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		SW506	5S50101Z97	SW TACT	THVV952GBA 9.5M AUTO	
L201	5CPX680J2T	COIL PEAKING	68UH(BLU-BLK)		SW507	5S50101Z97	SW TACT	THVV952GBA 9.5M AUTO	
L202	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		SW508	5S50101Z97	SW TACT	THVV952GBA 9.5M AUTO	
L251	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		SW509	5S50101Z97	SW TACT	THVV952GBA 9.5M AUTO	
L252	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		X301	5XE4R433TB	CRYSTAL QUARTZ	HC-49U 4.433619MHZ 15PPM	
L301	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		I3	PVMPJAD886	PCB MAIN AXIAL AS	DV-K826DY-AQ	
L302	5CPX151J--	COIL PEAKING	150UH J (RADIAL)		AM31	2TM1456000	TAPE MASKING	SI-502	
L303	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		AM31A	2TM110620R	TAPE MASKING	SI-600N RED	
L304	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		AM31B	2TM1106200	TAPE MASKING	SI-600N	
L401	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		C002	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	
L505	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		C003	CCZB1H101K	C CERA	50V B 100PF K	
L506	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)		C005	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	
L804	56X0000009	COIL BEAD	BLI 7.5 TAPPING	R	C006	CCZB1H101K	C CERA	50V B 100PF K	
L813	56C220K695	COIL CHOKE(CAP TYPE)	22UH K (CAP TYPE) 9X11.1		C012	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	
L814	5CPX680J2T	COIL PEAKING	68UH(BLU-BLK)		C054	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	
Q001	TZRC104M--	TR	KRC104M AUTO		C060	CCZF1H104Z	C CERA	50V HKF 0.1MF Z	
Q002	TZTA1273Y-	TR	KTA1273Y(966Y)		C062	CCZF1H104Z	C CERA	50V HKF 0.1MF Z	
Q003	TZTC3205Y-	TR	KTC3205Y (2236Y)		C067	CCZF1H104Z	C CERA	50V HKF 0.1MF Z	
Q201	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)		C160	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	
Q202	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)		C222	CCZF1H104Z	C CERA	50V HKF 0.1MF Z	
Q203	TZTA1266Y-	TR	KTA1266Y-(AUTO)(1015Y)		C261	CCZB1H391K	C CERA	50V B 390PF K	
Q204	TZTC3202Y-	TR	KTC3202Y (AUTO)(1959Y)		C271	CCZF1H104Z	C CERA	50V HKF 0.1MF Z	
Q205	TZTA1266Y-	TR	KTA1266Y-(AUTO)(1015Y)		C302	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	
Q206	TZRC102M--	TR	KRC102M(KEC)		C321	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	
Q251	TZRC104M--	TR	KRC104M AUTO		C322	CCZF1H104Z	C CERA	50V HKF 0.1MF Z	
Q252	TZTA1273Y-	TR	KTA1273Y(966Y)		C323	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	

ELECTRICAL PARTS LIST

LOC	PART-CODE	PART-NAME	PART-DESC	REMARK	LOC	PART-CODE	PART-NAME	PART-DESC	REMARK
C324	CCZF1H473Z	C CERA	50V F 0.047MF Z		D536	DZN4148---	DIODE	1N4148 ALJTO 52MM	
C325	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D602	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)	
C327	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D603	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C328	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D604	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C329	CCZB1H101K	C CERA	50V B 100PF K		D605	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)	
C330	CCZB1H101K	C CERA	50V B 100PF K		D610	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C348	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D611	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C350	CCZF1H104Z	C CERA	50V HIKF 0.1MF Z		D612	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C404	CCZF1H104Z	C CERA	50V HIKF 0.1MF Z		D613	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C405	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D614	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C406	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D615	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C407	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D616	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C408	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D617	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C409	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D618	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)	
C410	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D619	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C411	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D621	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C412	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D622	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C501	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D623	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C517	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D624	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C518	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D627	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C520	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D628	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C521	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D802	DZEG01C---	DIODE	EG01C	
C526	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D803	DZN4003---	DIODE	IN4003(DAEB0)	
C537	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D804	DZUZ3R0BSB	DIODE ZENER	UZ-3.0BSB(3.01-3.22V)	
C538	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D805	DZN4148---	DIODE	1N4148 AUTO 52MM	
C541	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D823	DZGDZP16B-	DIODE ZENER	GDZP16B1	
C546	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D825	D1SS244---	DIODE	1SS244	
C550	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D826	DZUZ33BSB-	DIODE ZENER	UZ-33BSB(30.32-31.38V)	
C551	CBZF1E223Z	C CERA SEMI	25V Y5V 0.022MF Z		D827	DZZ10BM---	DIODE ZENER	UZ-10BM	
C552	CBZF1E223Z	C CERA SEMI	25V Y5V 0.022MF Z		D828	DZEU01Z---	DIODE	EU01Z	
C553	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D829	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)	
C613	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		D830	DZN4003---	DIODE	IN4003(DAEB0)	
C614	CCZB1H331K	C CERA	50V B 330PF K		D831	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)	
C626	CCZB1H331K	C CERA	50V B 330PF K		JP004	85801060TA	WIRE COPPER	0.6X52MM TAPING	
C627	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		JP005	85801060TA	WIRE COPPER	0.6X52MM TAPING	
C832	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M		JP006	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D001	DZN4148---	DIODE	1N4148 AUTO 52MM		JP007	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D003	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)		JP009	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D051	DZN4148---	DIODE	1N4148 AUTO 52MM		JP011	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D201	DZN4148---	DIODE	1N4148 AUTO 52MM		JP016	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D301	DZN4148---	DIODE	1N4148 AUTO 52MM		JP019	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D504	DZN4148---	DIODE	1N4148 AUTO 52MM		JP020	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D509	DZN4148---	DIODE	1N4148 AUTO 52MM		JP022	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D513	DZN4148---	DIODE	1N4148 AUTO 52MM		JP023	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D515	DZN4003---	DIODE	IN4003(DAEB0)		JP031	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D517	DZN4148---	DIODE	1N4148 AUTO 52MM		JP035	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D519	DZN4003---	DIODE	IN4003(DAEB0)		JP054	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D523	DZUZ2R2BSC	DIODE ZENER	UZ-2.2BSB(6.16-6.40)		JP055	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D526	DZN4003---	DIODE	IN4003(DAEB0)		JP059	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D527	DZN4003---	DIODE	IN4003(DAEB0)		JP061	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D531	DZN4148---	DIODE	1N4148 AUTO 52MM		JP063	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D532	DZN4148---	DIODE	1N4148 AUTO 52MM		JP065	85801060TA	WIRE COPPER	0.6X52MM TAPING	
D533	DZN4148---	DIODE	1N4148 AUTO 52MM		JP066	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J	
D534	DZN4148---	DIODE	1N4148 AUTO 52MM		JP067	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J	
D535	DZN4148---	DIODE	1N4148 AUTO 52MM		JP068	85801060TA	WIRE COPPER	0.6X52MM TAPING	

ELECTRICAL PARTS LIST

LOC	PART-CODE	PART-NAME	PART-DESC	REMARK	LOC	PART-CODE	PART-NAME	PART-DESC	REMARK
JP074	85801060TA	WIRE COPPER	0.6X52MM TAPING		R265	RD-AZ132J-	R CARBON FILM	1/6 1.3K OHM J	
JP075	85801060TA	WIRE COPPER	0.6X52MM TAPING		R268	RD-AZ163J-	R CARBON FILM	1/6 16K OHM J	
JP084	85801060TA	WIRE COPPER	0.6X52MM TAPING		R270	RD-AZ823J-	R CARBON FILM	1/6 82K OHM J	
JP085	858010601A	WIRE COPPER	0.6X52MM TAPING		R271	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
JP092	85801060TA	WIRE COPPER	0.6X52MM TAPING		R272	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
JP097	85801060TA	WIRE COPPER	0.6X52MM TAPING		R276	RD-AZ680J-	R CARBON FILM	1/6 68 OHM J	
JP114	85801060TA	WIRE COPPER	0.6X52MM TAPING		R277	RD-AZ680J-	R CARBON FILM	1/6 68 OHM J	
JP176	85801060TA	WIRE COPPER	0.6X52MM TAPING		R278	RD-AZ201J-	R CARBON FILM	1/6 200 OHM J	
JP204	85801060TA	WIRE COPPER	0.6X52MM TAPING		R279	RD-AZ201J-	R CARBON FILM	1/6 200 OHM J	
JP266	85801060TA	WIRE COPPER	0.6X52MM TAPING		R301	RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J	
L151	5CPZ569K02	COIL PEAKING	5.6UH K (AXIAL 3.5MM)		R303	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J	
L305	5CPZ120K02	COIL PEAKING	12UH K (AXIAL 3.5MM)		R304	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J	
L311	5CPZ100K02	COIL PEAKING	10UH K (AXIAL 3.5MM)		R305	RD-AZ302J-	R CARBON FILM	1/6 3K OHM J	
L602	RD-AZ821J-	R CARBON FILM	1/6 820 OHM J		R306	RD-AZ302J-	R CARBON FILM	1/6 3K OHM J	
L604	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)		R308	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
L605	RD-AZ821J-	R CARBON FILM	1/6 820 OHM J		R311	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
L606	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)		R313	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J	
L609	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)		R322	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
L610	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)		R323	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J	
L612	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)		R325	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
L613	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)		R348	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J	
L803	5PB13857--	COIL BEAD	B13857(AXIAL)		R357	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J	
L812	5PB13857--	COIL BEAD	B13857(AXIAL)		R401	RD-AZ753J-	R CARBON FILM	1/6 75K OHM J	
R001	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J		R5A1	RD-AZ333J-	R CARBON FILM	1/6 33K OHM J	
R002	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J		R5A3	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R003	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R5A4	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R004	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R5B1	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R005	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J		R5B5	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R006	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J		R501	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J	
R009	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R502	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R010	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		R503	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R011	RD-AZ301J-	R CARBON FILM	1/6 300 OHM J		R505	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R051	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R506	RD-AZ201J-	R CARBON FILM	1/4 200 OHM J	
R052	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R508	RD-AZ121J-	R CARBON FILM	1/6 120 OHM J	
R053	RD-AZ470J-	R CARBON FILM	1/6 47 OHM J		R509	RD-AZ474J-	R CARBON FILM	1/6 470K OHM J	
R054	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R510	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J	
R15A	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J		R511	RD-AZ121J-	R CARBON FILM	1/6 120 OHM J	
R201	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J		R513	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R206	RD-AZ911J-	R CARBON FILM	1/6 910 OHM J		R515	RD-AZ474J-	R CARBON FILM	1/6 470K OHM J	
R207	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J		R518	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
R208	RD-AZ183J-	R CARBON FILM	1/6 18K OHM J		R519	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R216	RD-AZ470J-	R CARBON FILM	1/6 47 OHM J		R520	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R217	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		R521	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R218	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J		R522	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R224	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J		R523	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R234	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		R524	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R235	RD-AZ433J-	R CARBON FILM	1/6 43K OHM J		R525	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R237	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J		R526	RD-AZ430J-	R CARBON FILM	1/6 43 OHM J	
R240	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J		R527	RD-AZ430J-	R CARBON FILM	1/6 43 OHM J	
R241	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J		R528	RD-AZ430J-	R CARBON FILM	1/6 43 OHM J	
R256	RD-AZ303J-	R CARBON FILM	1/6 30K OHM J		R529	RD-AZ430J-	R CARBON FILM	1/6 43 OHM J	
R258	RD-AZ823J-	R CARBON FILM	1/6 82K OHM J		R530	RD-AZ430J-	R CARBON FILM	1/6 43 OHM J	
R259	RD-AZ163J-	R CARBON FILM	1/6 16K OHM J		R531	RD-AZ430J-	R CARBON FILM	1/6 43 OHM J	
R261	RD-AZ163J-	R CARBON FILM	1/6 16K OHM J		R532	RD-AZ430J-	R CARBON FILM	1/6 43 OHM J	
R263	RD-AZ132J-	R CARBON FILM	1/6 1.3K OHM J		R533	RD-AZ270J-	R CARBON FILM	1/6 27 OHM J	

ELECTRICAL PARTS LIST

LOC	PART-CODE	PART-NAME	PART-DESC	REMARK	LOC	PART-CODE	PART-NAME	PART-DESC	REMARK
R534	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		R804	RD-4Z394JS	R CARBON FILM	1/4 390K OHM J SMALL	
R535	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		R805	RD-4Z394JS	R CARBON FILM	1/4 390K OHM J SMALL	
R536	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		R806	RD-AZ273J-	R CARBON FILM	1/6 27K OHM J	
R537	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		R809	RD-2Z820JS	R CARBON FILM	1/2 82 OHM J SMALL	
R538	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		R810	RD-2Z820JS	R CARBON FILM	1/2 82 OHM J SMALL	
R539	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		R811	RD-AZ681J-	R CARBON FILM	1/6 680 OHM J	
R540	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		R821	RD-4Z360JS	R CARBON FILM	1/4 36 OHM J SMALL	
R541	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		R822	RD-AZ182G-	R CARBON FILM	1/6 1.8K OHM G	
R542	RD-AZ105J-	R CARBON FILM	1/6 1M OHM J		R823	RD-AZ680J-	R CARBON FILM	1/6 68 OHM J	
R544	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J		R824	RD-AZ470G-	R CARBON FILM	1/6 47 OHM G	
R545	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		R825	RD-AZ132G-	R CARBON FILM	1/6 1.3K OHM G	
R546	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		R827	RD-AZ241J-	R CARBON FILM	1/6 240 OHM J	
R547	RD-AZ301J-	R CARBON FILM	1/6 300 OHM J		R828	RD-4Z622J-	R CARBON FILM	1/4 6.2K OHM J	
R548	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J		R830	RD-2Z301JS	R CARBON FILM	1/2 300 OHM J SMALL	
R553	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J		R832	RD-AZ180J-	R CARBON FILM	1/6 18 OHM J	
R554	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		UM01	97P65277MA	PCB MAIN	330X246X1.6T(K826D)	
R555	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		14	PVMPJVD886	PCB MAIN J/V ONLY AS	DV-K826DY-AQ(277MA,HIFI)	
R556	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		JP001	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R559	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		JP002	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R562	RD-AZ273J-	R CARBON FILM	1/6 27K OHM J		JP003	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R564	RD-AZ201J-	R CARBON FILM	1/6 200 OHM J		JP008	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R566	RD-AZ241J-	R CARBON FILM	1/6 240 OHM J		JP010	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R567	RD-AZ241J-	R CARBON FILM	1/6 240 OHM J		JP012	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R569	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J		JP013	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R570	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		JP014	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R571	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		JP015	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R573	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		JP017	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R574	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		JP018	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R575	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		JP021	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R576	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		JP024	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R577	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		JP025	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R578	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		JP026	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R579	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		JP027	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R580	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		JP028	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R581	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J		JP029	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R582	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		JP034	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R584	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		JP036	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R585	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		JP037	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R586	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J		JP038	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R589	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		JP039	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R590	RD-AZ393J-	R CARBON FILM	1/6 39K OHM J		JP040	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R598	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		JP041	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R599	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J		JP042	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R602	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J		JP043	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R603	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J		JP044	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R604	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J		JP045	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R607	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J		JP046	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R608	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J		JP047	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R609	RD-AZ773J-	R CARBON FILM	1/6 27K OHM J		JP048	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R610	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		JP049	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R614	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J		JP050	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R615	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J		JP051	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R616	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J		JP052	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R801	RC-2Z565KP	R CARBON COMP	1/2 5.6M OHM K		JP053	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R802	RC-2Z565KP	R CARBON COMP	1/2 5.6M OHM K		JP056	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	

ELECTRICAL PARTS LIST

[illegible]

ELECTRICAL PARTS LIST

[illegible]

ELECTRICAL PARTS LIST

2. TABLE OF DIFFERENT PART LIST FOR PCB MAIN AS 2-1. 1PERI OPTION (MONO OPTION)

LOC.	2PERI			1PERI		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
B001	97P0720300	BOARD ANT	HI-PS(HB)	97P0720200	BOARD ANT	HI-PS(HB)
JK601	97P6313300	JACK DOUBLE SCART	DSAM-9621			
JK602				97P6313400	JACK SCART	DSAM-9622
C224	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	HCBK152KCA	C CHIP CERA	50V X7R 1500PF K 2012
C310	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	HCBK223KCA	C CHIP CERA	50V X7R 0.022MF K 2012
C612	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012			
C628	HCBK223KCA	C CHIP CERA	50V X7R 0.022MF K 2012			
C640	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012			
IC601	1MM1443XJ-	IC AV SW	MM143XJ			
L608	HLX1210001	BEAD CHIP	TB201209Z121			
RJ06				HRFT000-CA	R CHIP	1/10 0 OHM 2012
RJ25	HRFT000-CA	R CHIP	1/10 0 OHM 2012			
RJ82	HRFT000-CA	R CHIP	1/10 0 OHM 2012			
RJ90	HRFT000-CA	R CHIP	1/10 0 OHM 2012			
R560	HRFT102JCA	R CHIP	1/10 1K OHM J 2012			
R611	HRFT750JCA	R CHIP	1/10 75 OHM J 2012			
R617	HRFT151JCA	R CHIP	1/10 150 OHM J 2012			
R618	HRFT750JCA	R CHIP	1/10 75 OHM J 2012			
C601	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C603	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C605	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C608	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7			
C609	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7	CEXE1H109F	C ELECTRO	50V RMB 1MF 4*7
C610	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7			
C611	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP			
C619	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7			
C620	CEXF1A471V	C ELECTRO	10V RSS 470MF 8X11.5			
C622	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)			
C650	CEXF1C100A	C ELECTRO	16V RSM 10MF 4X7			
C653	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7			
C658	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
Q604	TZRC102M--	TR	KRC102M(KEC)			
C211				CCZF1H104Z	C CERA	50V HIKF 0.1MF Z
C350	CCZF1H104Z	C CERA	50V HIKF 0.1MF Z			
C614	CCZB1H331K	C CERA	50V B 330PF K			
D603	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D604	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D623	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D624	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			

ELECTRICAL PARTS LIST

LOC.	2PERI			1PERI		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
JP031	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP033				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP065	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP066	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J			
JP067	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J			
JP075	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP080	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP084	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP085	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP090	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP098				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP106				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP107				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP108	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP113				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP119				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP128				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP129	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP130	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP144	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP147	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP155	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP156	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP174	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP175	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP275	85801060TA	WIRE COPPER	0.6X52MM TAPING			
L606	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)			
R261	85801060TA	WIRE COPPER	0.6X52MM TAPING			
R506	RD4Z201J-	R CARBON FILM	1/4 200 OHM J	RD-4Z301J-	R CARBON FILM	1/4 300 OHM J
R607	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J			
R608	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J			
R609	RD-AZ273J-	R CARBON FILM	1/6 27K OHM J			
R610	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J			
R615	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J			
R616	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J			

ELECTRICAL PARTS LIST

2-2. 1PERI OPTION (IFI OPTION)

LOC.	2PERI			1PERI		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
B001	97P0720400	BOARD ANT	HI-PS(HB)	97P0720200	BOARD ANT	HI-PS(HB)
B001A	7175300812	SCREWW TAPPTITE	TT2 FLT 3X8 MFSN BK			
JK601	97P6313300	JACK DOUBLE SCART	DSAM-9621			
JK602				97P6313400	JACK SCART	DSAM-9622
JK605	97P6314900	JACK PIN	DPAM-9825			
C616	HCBK223KCA	C CHIP CERA	50V X7R 0.022MF K 2012			
C628	HCBK223KCA	C CHIP CERA	50V X7R 0.022MF K 2012			
C640	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012			
IC601	1MM1443XJ-	IC A/V SW	MM143XJ			
L608	HLX1210001	BEAD CHIP	TB201209Z121			
R560	HRFT102JCA	R CHIP	1/10 1K OHM J 2012			
R611	HRFT750JCA	R CHIP	1/10 75 OHM J 2012			
R618	HRFT750JCA	R CHIP	1/10 75 OHM J 2012			
C278	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C279	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C601	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C605	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C610	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7			
C620	CEXF1A471V	C ELECTRO	10V RSS 470MF 8X11.5			
C653	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)			
C655	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)			
Q604	TZRC102M--	TR	KRC102M(KEC)			
C614	CCZB1H331K	C CERA	50V B 330PF K			
C626	CCZB1H331K	C CERA	50V B 330PF K			
D508	DZN4148---	DIODE	1N4148 AUTO 51MM			
D603	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D604	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D621	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D622	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D623	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D624	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
L604	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)			
L606	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)			
R278	RD-AZ201J-	R CARBON FILM	1/6 200 OHM J			
R279	RD-AZ201J-	R CARBON FILM	1/6 200 OHM J			
R607	RD-AZ512J-	R CARBON FILM	1/6 5 1K OHM J			
R608	RD-AZ512J-	R CARBON FILM	1/6 5 1K OHM J			
R609	RD-AZ273J-	R CARBON FILM	1/6 2 7K OHM J			
R610	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J			
R615	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J			

ELECTRICAL PARTS LIST

2-3.2HEAD OPTION

LOC.	4HD			2HD		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
P401	97P62G06D7	CONN HOUSING	GF120 FPC 1.25MM 7P	97P62G06D4	CONN HOUSING	GF120 FPC 1.25MM 4P
C416				HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C417				HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
Q525	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)			
C409	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M			
C410	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M			
C411	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	85801060TA	WIRE COPPER	0.6X52MM TAPING
C412	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M	85801060TA	WIRE COPPER	0.6X52MM TAPING
D513	DZN4148---	DIODE	1N4148 AUTO 52MM			
JP002	85801060TA	WIRE COPPER	0.6X52MM TAPING			
R5B4				RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R589	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J			
R590	RD-AZ393J-	R CARBON FILM	1/6 39K OHM J			

2-4.FRONT AV OPTION (MONO OPTION)

LOC.	FRONT AV			BASIC		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
JK606	97P6315900	JACK PIN	DPAE-9931			
C282	HCLK331JCA	C CHIP CERA	50V SL 330PF J 2012			
C634	HCQK330JCA	C CHIP CERA	50V CH 33PF J 2012			
C635	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012			
L611	HLX1210001	BEAD CHIP	TB201209Z121			
RJ91	HRFT000-CA	R CHIP	1/10 0 OHM 2012			
R269	HRFT153JCA	R CHIP	1/10 15K OHM J 2012			
R613	HRFT750JCA	R CHIP	1/10 75 OHM J 2012			
C317	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C213				CCZF1H104Z	C CERA	50V HIKF 0.1MF Z
C222	CCZF1H104Z	C CERA	50V HIKF 0.1MF Z			
C351				CCZF1H104Z	C CERA	50V HIKF 0.1MF Z
D509	DZN4148---	DIODE	1N4148 AUTO 52MM			
D615	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D616	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D618	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)			
D619	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
L612	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)			
R241	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J			
R270	RD-AZ333J-	R CARBON FILM	1/6 33K OHM J			

ELECTRICAL PARTS LIST

LOC.	FRONT AV			BASIC		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
JP004	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP016	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP035	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP063	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP074	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP097	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP114	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP204	85801060TA	WIRE COPPER	0.6X52MM TAPING			

2-5.FRONT AV OPTION (HIFI OPTION)

LOC.	FRONT AV			BASIC		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
JK606	97P6315900	JACK PIN	DPAE-9931			
C239	HCLK331JCA	C CHIP CERA	50V SL 330PF J 2012			
C282	HCLK331JCA	C CHIP CERA	50V SL 330PF J 2012			
C634	HCQK330JCA	C CHIP CERA	50V CH 33PF J 2012			
C635	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012			
L611	HLX1210001	BEAD CHIP	TB201209Z121			
RJ85	HRFT000-CA	R CHIP	1/10 0 OHM 2012			
R257	HRFT163JCA	R CHIP	1/10 16K OHM J 2012			
R269	HRFT163JCA	R CHIP	1/10 16K OHM J 2012			
R613	HRFT750JCA	R CHIP	1/10 75 OHM J 2012			
C317	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C351				CCZF1H104Z	C CERA	50V HIKF 0.1MF Z
D509	DZN4148---	DIODE	1N4148 AUTO 52MM			
D614	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D615	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D616	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D617	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
D618	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)			
D619	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)			
L612	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)			
L613	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)			
R240	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J			
R241	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J			
R258	RD-AZ823J-	R CARBON FILM	1/6 82K OHM J			
R270	RD-AZ823J-	R CARBON FILM	1/6 82K OHM J			
JP004	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP016	85801060TA	WIRE COPPER	0.6X52MM TAPING			

ELECTRICAL PARTS LIST

LOC.	FRONT AV			BASIC		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
JP035	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP063	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP074	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP097	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP114	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP204	85801060TA	WIRE COPPER	0.6X52MM TAPING			

2.6. PANEL OPTION

LOC.	NORMAL			3,6 PANEL		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
SW04A				5S50101Z97	SW TACT	SKHV10914B 9.5M AUTO
SW05A				5S50101Z97	SW TACT	SKHV10914B 9.5M AUTO
SW504	5S50101Z97	SW TACT	SKHV10914B 9.5M AUTO			
SW506	5S50101Z97	SW TACT	SKHV10914B 9.5M AUTO			
D532	DZN4148---	DIODE	1N4148 AUTO 52MM			
D532A				DZN4148---	DIODE	1N4148 AUTO 52MM
D533A				DZN4148---	DIODE	1N4148 AUTO 52MM
JP235				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP266	85801060TA	WIRE COPPER	0.6X52MM TAPING			

2.7. PHONE OPTION (MONO OPTION)

LOC.	1PERI			PHONE		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
B001	97P0720200	BOARD ANT	HI-PS(HB)	97P0722200	BOARD ANT	HI-PS(HB)
JK602	97P6313400	JACK SCART	DSAM-9622			
JK604				97P6315200	JACK PIN	DPAM-9916
RJ23	HRF8000-EA	R CHIP	1/8 0 OHM 3216			
RJ96	HRFT000-CA	R CHIP	1/10 0 OHM 2012			
R605	HRFT512JCA	R CHIP	1/10 5.1K OHM J 2012			
Q601	TZSR2001--	TR	KSR2001 (AUTO)			
Q602	TZRC104M--	TR	KRC104M AUTO			
Q603	TZRC104M--	TR	KRC104M AUTO			
D602	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)			
D605	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)			
JP068	85801065GY	WIRE COPPER	AWG22 1/0 65 TIN COATING			
L610	5CPZ229K02	COIL PEAKING	2.2UH K(AXIAL 3.5MM)			
R602	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J			
R603	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J			

ELECTRICAL PARTS LIST

2-8. PHONE OPTION (HIFI OPTION)

LOC.	1PERI			PHONE		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
B001	97P0720200	BOARD ANT	HI-PS(HB)	97P0720500	BOARD ANT	HI-PS(HB)
JK602				97P6313400	JACK SCART	DSAM-9622
JK603	97P6313700	JACK PIN	DPAM-9639			
Q601	TZSR2001--	TR	KSR2001 (AUTO)			
Q602	TZRC104M--	TR	KRC104M AUTO			
Q603	TZRC104M--	TR	KRC104M AUTO			
D602	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)			
D605	DZUZ13BSB-	DIODE ZENER	UZ-13BSB(12.59-13.16V)			
JP068	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING			
R602	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J			
R603	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J			

2-9. POWER COMP. OPTION

LOC.	30 MIN.			1 MIN.		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
C503				CEXF1A221V	C ELECTRO	10V RSS 220MF 6.3X 11
C508	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C519	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012			
C524	CDXA0H104K	C SUPER	5.5V 0.1F TAPING			
C529	HCQK180JCA	C CHIP CERA	50V CH 18PF J 2012	HRFT000-CA	R CHIP	1/10 0 OHM 2012
C530	HCQK180JCA	C CHIP CERA	50V CH 18PF J 2012			
D507	DZN4148---	DIODE	1N4148 AUTO 52MM			
D535				DZN4148---	DIODE	1N4148 AUTO 52MM
D536				DZN4148---	DIODE	1N4148 AUTO 52MM
IC503	14ATM24D08	IC EEPROM	ATM24D08	14ATM24S16	IC EPROM	AT24C16N-10SC
IC504	1KA7533Z--	IC SWITCH RESET	KA7533Z	1K1A7042P-	IC SWITCH	KIA7042P
JP167				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP261				85801060TA	WIRE COPPER	0.6X52MM TAPING
JP262	85801060TA	WIRE COPPER	0.6X52MM TAPING			
R501	85801060TA	WIRE COPPER	0.6X52MM TAPING	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R502				RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R503				RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R504				HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R512	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J			
R543	HRFT104JCA	R CHIP	1/10 100K OHM J 2012			
X502	5XZR03276G	CRYSTAL QUARTZ	SO-26 32.768000KHZ 10PPM			

ELECTRICAL PARTS LIST

2-10.PDC OPTION

LOC.	PDC			BASIC		
	PART-CODE	PART-NAME	PART-DESC.	PART-CODE	PART-NAME	PART-DESC.
C153	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012			
C157	HCBK563KCA	C CHIP CERA	50V X7R 0.056MF K 2012			
C159	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012			
C161	HCQK220JCA	C CHIP CERA	50V CH 22PF J 2012			
IC151	1LC74793--	IC VPS(PDC)	LC74793			
R152	HRFT103JCA	R CHIP	1/10 10K OHM J 2012			
R153	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012			
R154	HRFT103JCA	R CHIP	1/10 10K OHM J 2012			
R155	HRFT272JCA	R CHIP	1/10 2.7K OHM J 2012			
C151	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP			
C152	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C154	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP			
C158	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7			
Q309	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)			
C160	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M			
D504	DZN4148---	DIODE	1N4148 AUTO 52MM			
L151	5CPZ569K02	COIL PEAKING	5.6UH K (AXIAL 3.5MM)			
R357	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J			
JP005	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP006	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP009	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP011	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP019	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP023	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP054	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP055	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP059	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP061	85801060TA	WIRE COPPER	0.6X52MM TAPING			
JP176	85801060TA	WIRE COPPER	0.6X52MM TAPING			



V23078

Technical Service Guide

VCR MECHANISM UNIT
(K-MECHA DECK)



DAEWOO ELECTRONICS CO., LTD.

DAEWOO

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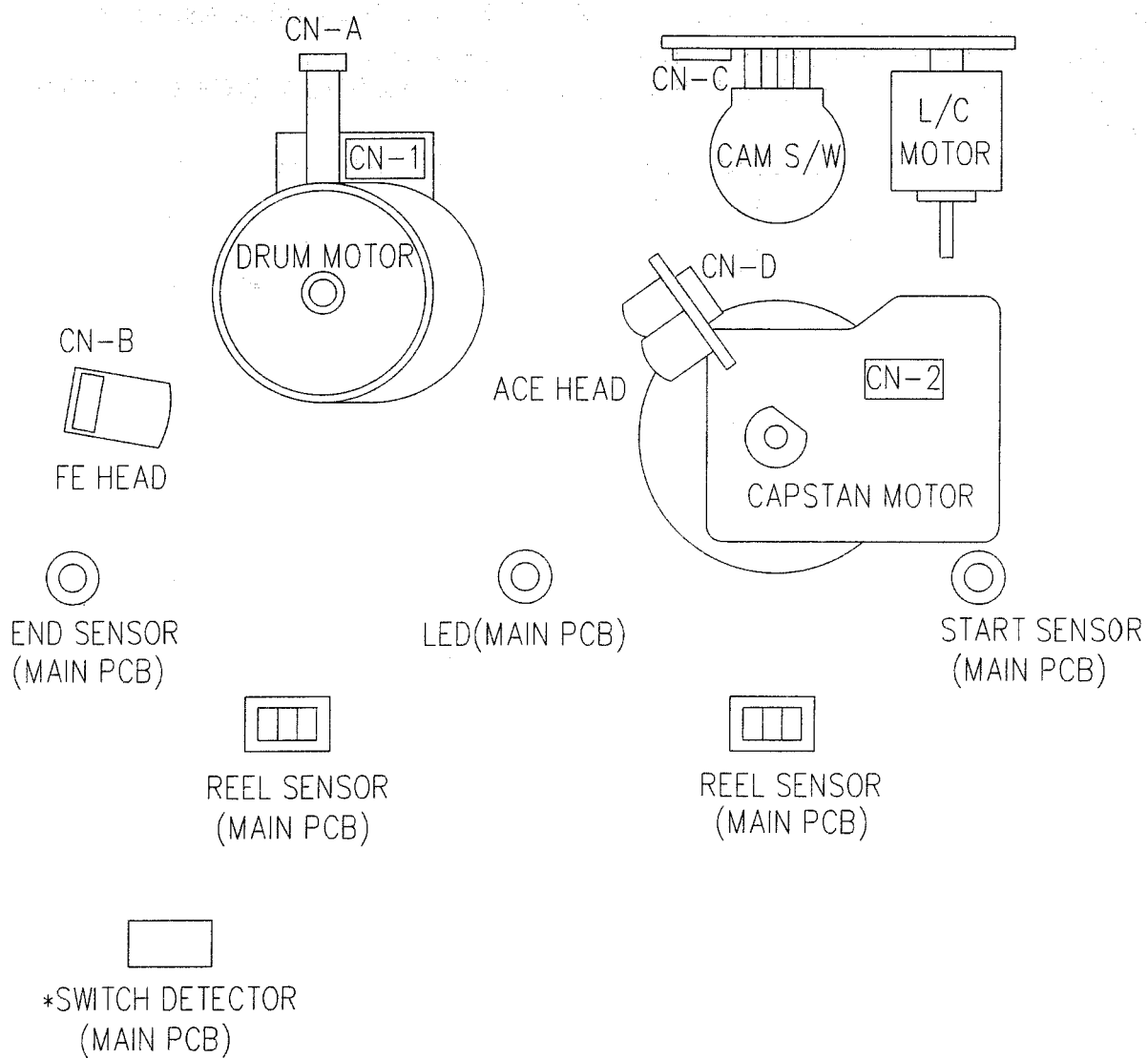
~~1. DESCRIPTION OF THE MECHANISM~~

1-1 CHARACTERISTIC OF THE K-DECK MECHANISM

- 1) K-MECHA DECK follows the VHS standard and NTSC standard.
- 2) K-MECHA DECK uses three motors (DRUM MOTOR, CAPSTAN MOTOR and L/C MOTOR)
- 3) K-MECHA DECK uses L/C MOTOR to drive FRONT LOADING.
- 4) K-MECHA DECK recognizes the mode by the 4-BIT MODE signal. This 4-BIT MODE signal is generated by the CAM SWITCH which is driven by the L/C MOTOR.
- 5) K-MECHA DECK is operated by 7 MODES (EJECT/INITIAL/REV/IDLE/PLAY, STOP, SLOW/BRAKE/FF & REW).
- 6) K-MECHA DECK reduces the mode shifting time, that is, picture playing time by using the FULL LOADING SYSTEM that has the wrapped DRUM by the tape.
- 7) K-MECHA DECK is separated from Main PCB. When assembling, it is connected by B-B TYPE CONNECTOR. The CAPSTAN MOTOR and DRUM MOTOR of K-MECHA DECK and the MAIN PCB DECK are directly connected without using cable.

1-2 WIRE DIAGRAM

1-2-1) WIRE DIAGRAM



1-2-2) CONNECTOR PIN ARRANGEMENT

CN-A (2 HEAD MONO)

1	VR1
2	COMMON
3	VL1
4	GND

CN-B

1	FE HEAD
2	GND

CN-1

1	DRUM M/T 12V
2	DRUM SPP CTL
3	DRUM PG
4	NON CONTACT
5	GND
6	DRUM FG

CN-A (4 HEAD MONO)

1	VL2
2	COMMON
3	VR2
4	GND
5	VR1
6	COMMON
7	VL1
8	GND

CN-C

1	L/C MT (+)
2	L/C MT (-)
3	GND
4	CAM D
5	CAM C
6	CAM B
7	CAM A

CN-2

1	EVER 5V
2	CAPSTAN F/R
3	CAPSTAN FG
4	CTL-REF
5	CTL
6	I-LIMIT
7	CAPSTAN MT 1 2V
8	GND
9	IC GND
10	NON CONTACT

CN-A (4 HEAD HI-FI)

1	VL2
2	COMMON
3	VR2
4	GND
5	VR1
6	COMMON
7	VL1
8	GND
9	AL1
10	COMMON
11	AR1
12	GND

CN-D

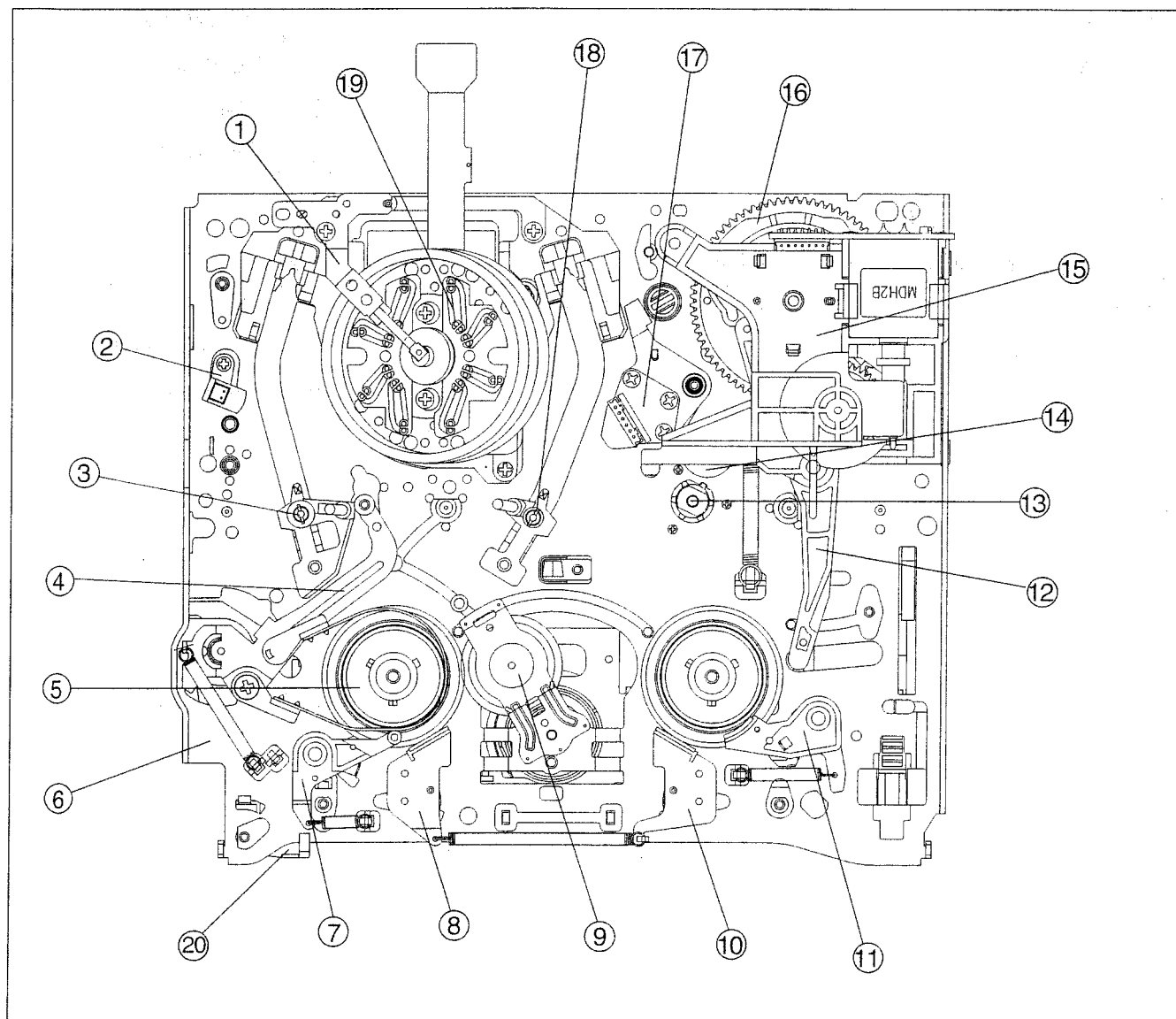
1	CTL
2	CTL
3	AUDIO
4	AUDIO
5	A ERASE
6	GND

2. ASSEMBLING DIAGRAM & CHECK FOR THE MAJOR PARTS

2-1. ASSEMBLING DIAGRAM

2-1-1) ASSEMBLING DIAGRAM OF DECK ASS'Y

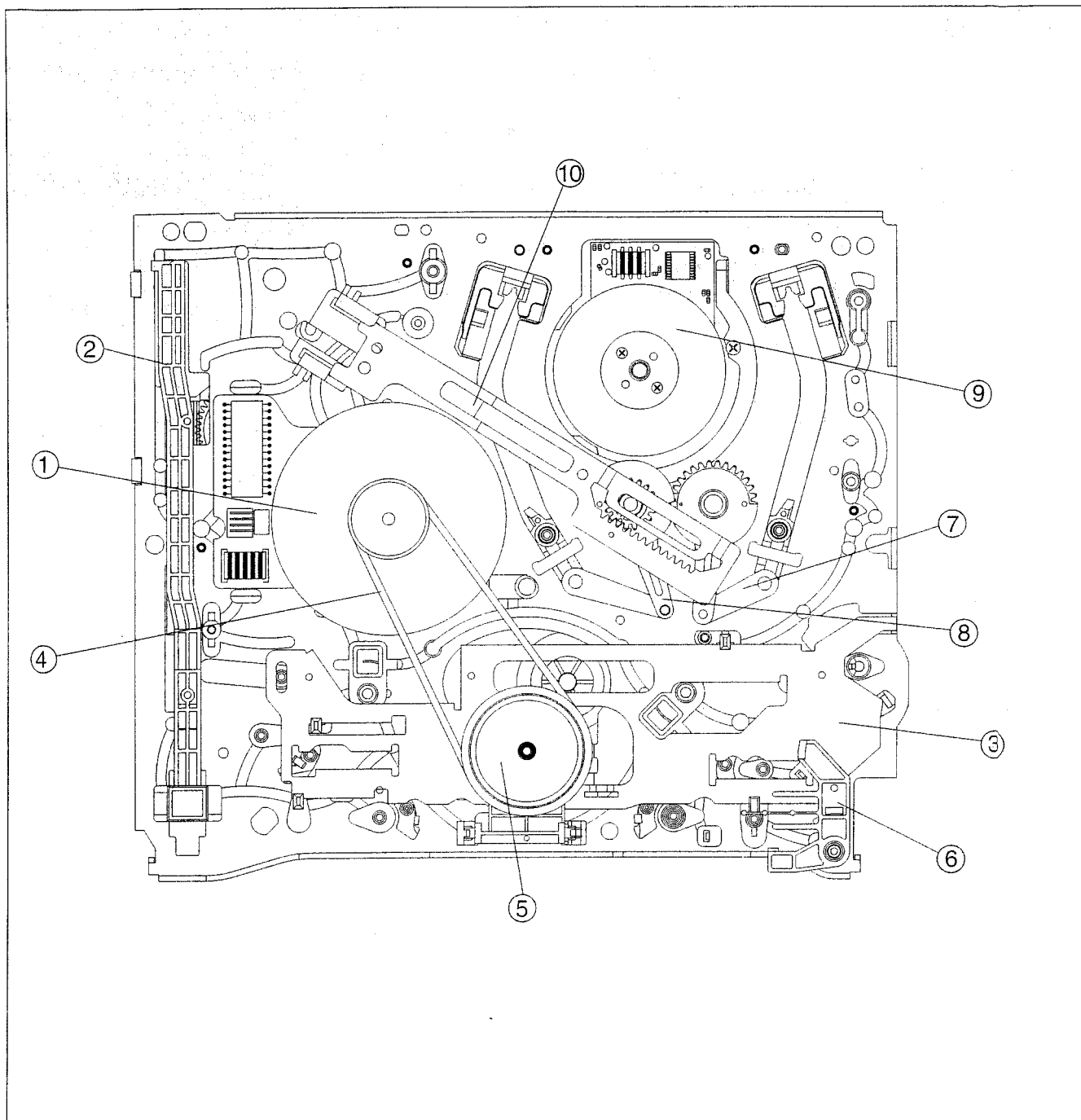
A. TOP VIEW



1. EARTH BRKT ASS'Y
2. FE HEAD
3. S SLANT POLE ASS'Y
4. TENSION BAND ASS'Y
5. REEL TABLE
6. MAIN BASE ASS'Y
7. S SUB BRAKE ASS'Y
8. S MAIN BRAKE ASS'Y
9. IDLER PLATE TOTAL ASS'Y
10. T MAIN BRAKE ASS'Y

11. T-SUB BRAKE ASS'Y
12. RELAY LEVERL
13. CAPSTAN MOTOR
14. PINCH LEVER TOTAL ASS'Y
15. L/C BRKT TOTAL ASS'Y
16. CAM GEAR
17. A/C HEAD TOTAL ASS'Y
18. T SLANT POLE ASS'Y
19. DRUM TOTAL ASS'Y
20. RECORD SAFETY LEVER

B. BOTTOM VIEW

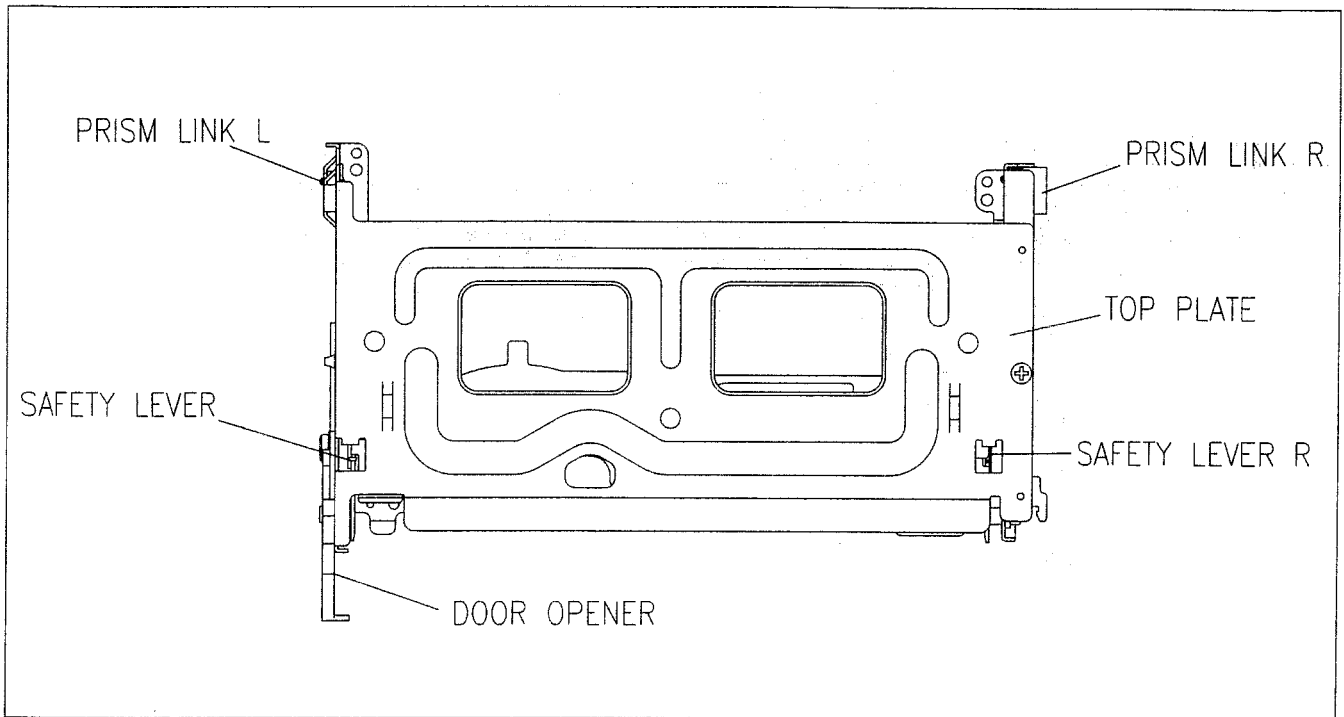


- 1. CAPSTAN MOTOR
- 2. F/L RACK
- 3. CONNECT PLATE
- 4. REEL BELT
- 5. REEL GEAR TOTAL ASS'Y

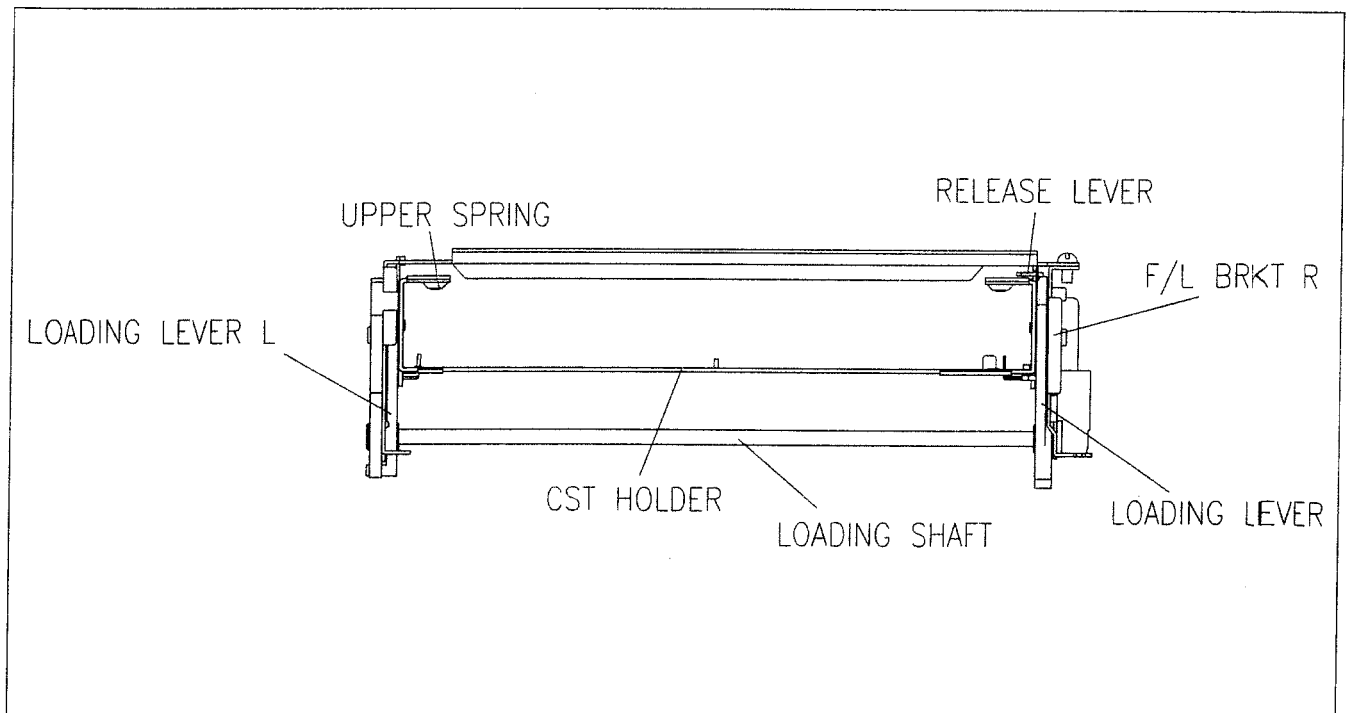
- 6. RECORD SAFETY LEVER
- 7. L LOADING ASS'Y
- 8. R LOADING ASS'Y
- 9. DRUM TOTAL ASS'Y
- 10. LOADING RACK ASS'Y

2-1-2) PARTS LOCATION OF FRONT LOADING ASS'Y

A. TOP VIEW



B. FRONT VIEW



2-2. PERIODIC MAINTENANCE AND SERVICE SCHEDULE

2-2-1) PERIODIC MAINTENANCE AND SERVICE SCHEDULE

A. In order to effectively maintain the excellent performance and fully utilize the features of this apparatus, and to lengthen the life of mechanism and tapes, we strongly urge you to perform the periodic maintenance and inspection as described below.

※ After repairing, do the maintenance as described below irrespective of the length of time in use.

B. Cleaning of the Head Drum Ass'y

- Clean the Drum assembly with a cleaning cloth soaked in liquid cleaner (alcohol) by placing lightly against the Drum slowly revolving the rotating HEAD DRUM Ass'y by hand (Do not rotate the upper Drum by applying the electric power to the motor for cleaning).
- Do not move the cleaning cloth in the vertical direction against the heat-tip.

C. Cleaning of the tape transporting section.

- Clean the tape transporting parts with a cleaning cloth soaked in the alcohol.

D. Cleaning of driving section

- Clean the driving section with a cloth soaked in the alcohol.

E. Routine inspection

- Perform the maintenance and inspection as separately described depending on the period of time in use.
- Refer to the table of 2-2-3.

2-2-2) CLEANING AND LUBRICATION

A. Cleaning of Tape Transporting section and Driving section

a. Cleaning of Tape Transporting section

— The following parts should be cleaned after every 500 hours of use.

- | | | |
|------------------|-------------------|-------------------|
| • TENSION POLE | • S SLANT POLE | • AC HEAD/AE HEAD |
| • S GUIDE POST | • VIDEO HEAD/DRUM | • T GUIDE POST |
| • FE HEAD | • T SLANT POLE | • CAPSTAN SHAFT |
| • S GUIDE ROLLER | • T GUIDE ROLLER | • PINCH ROLLER |
| • VERTICAL POST | | |

— As the above parts contact with video tape, they tend to collect dust particles if they are stained with dust or foreign substance it have a bad effect on the picture and lead to damage of the tape.

— After cleaning with alcohol, allow the parts to dry thoroughly before using a cassette tape.

b. Cleaning of Driving section

- | | | |
|--------------|---------------------------|---------------|
| • REEL TABLE | • CAPSTAN FLYWHEEL/PULLEY | • REEL PULLEY |
|--------------|---------------------------|---------------|

B. LUBRICATION

- | | | |
|---------------|---------------------|------------------|
| • S REEL POST | • T REEL TABLE POST | • REEL GEAR POST |
|---------------|---------------------|------------------|

— After cleaning the parts with alcohol, lubricate these with one or two drops oil.

2-2-3) SERVICE SCHEDULE FOR THE MAJOR PARTS

Following parts should be receive periodic service according to the recommended intervals.

NAME	PERIODIC SERVICE (TIME)				
	1000	2000	3000	4000	5000
DRUM TOTAL ASS'Y	★	◎	★	◎	★
CAPSTAN MOTOR		◎		◎	
L/C BRKT TOTAL ASS'Y		◎		◎	
REEL BELT		◎		◎	
IDLER PLATE TOTAL ASS'Y		◎		◎	
REEL TABLE			◎		
T SUB BRAKE ASS'Y		◎		◎	
TENSION BAND ASS'Y		◎		◎	
S MAIN BRAKE ASS'Y		◎		◎	
T MAIN BRAKE ASS'Y		◎		◎	
PINCH ROLLER ASS'Y		★	◎	★	
AC HEAD ASS'Y			◎		
FE HEAD					◎
REEL GEAR TOTAL ASS'Y		◎		◎	

★ : Check and Replace if necessary.

◎ : Replace

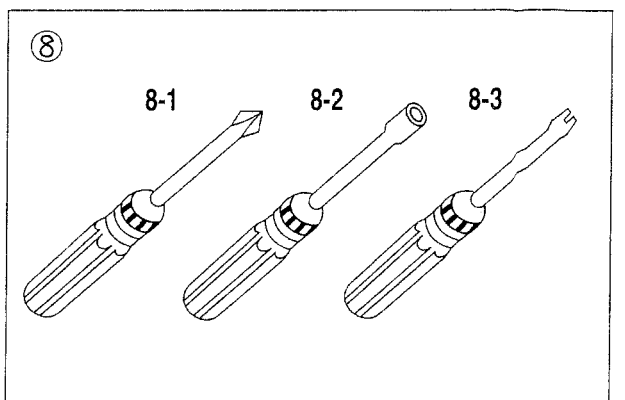
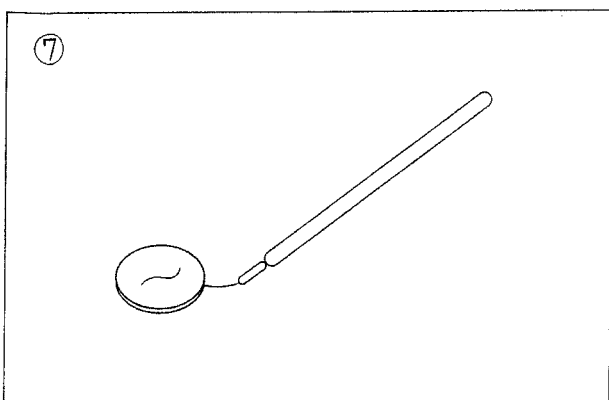
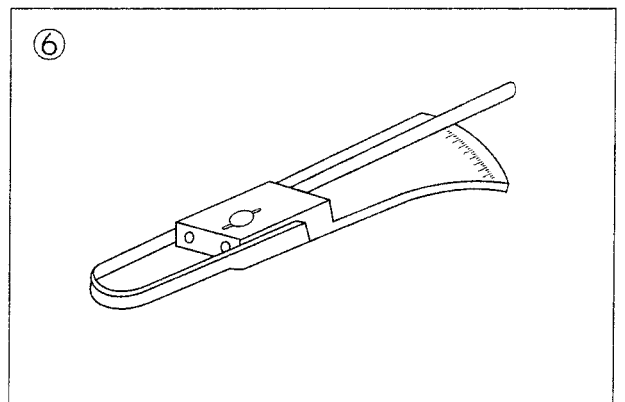
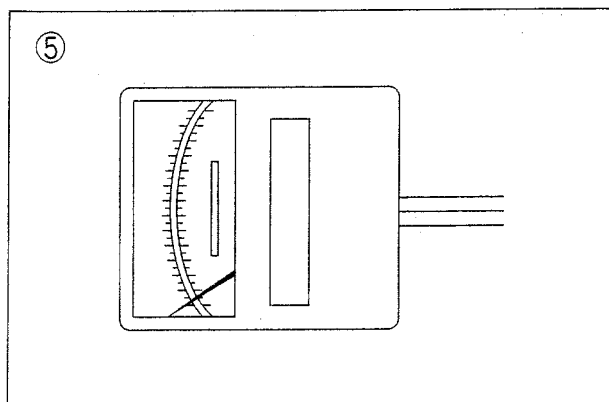
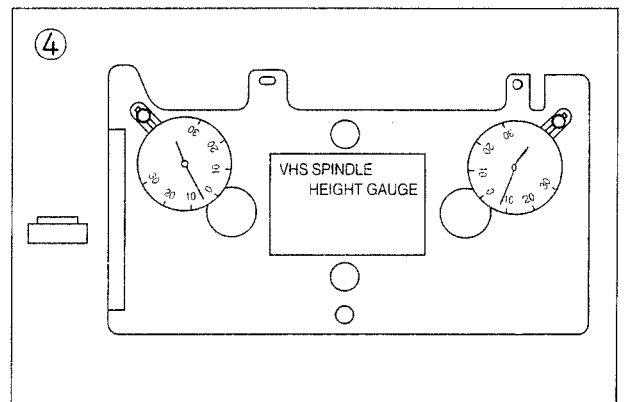
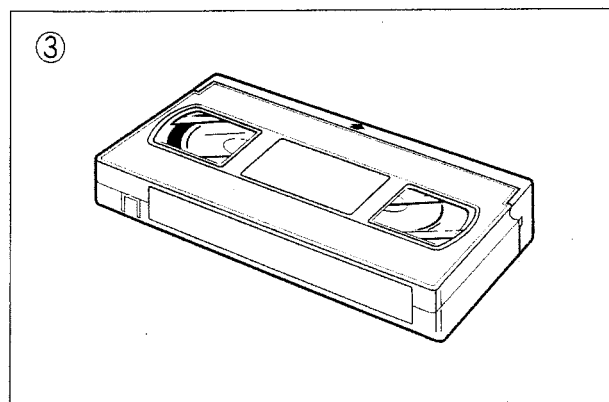
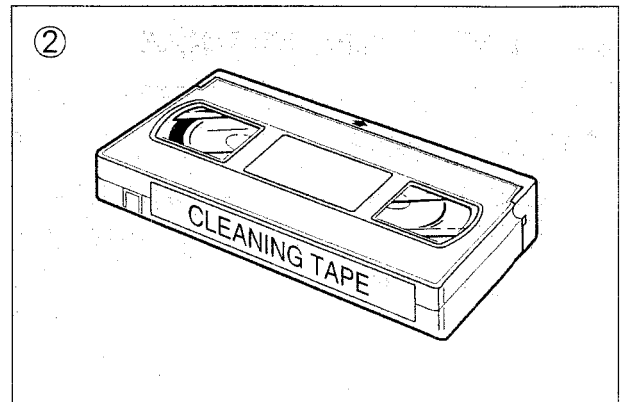
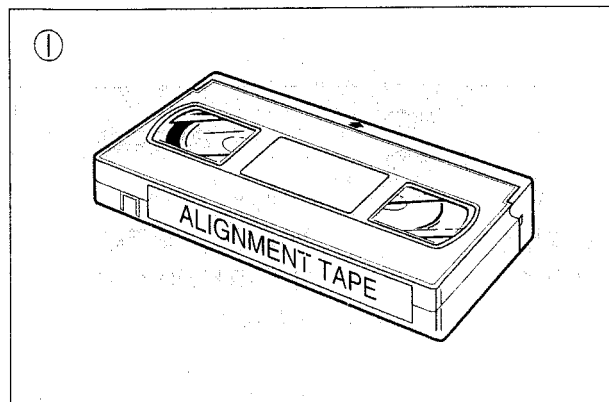
Note: Even though the unit is not used frequently, cleaning, lubrication and replacement of the belt should be undertaken every 2 years.

2-3. JIGS AND TOOLS

2-3-1) LIST OF JIGS AND TOOLS

NO	ITEMS	MODEL	FIG. NO	REMARKS
1	ALIGNMENT TAPE	NTSC: SP MONOSCOPE 7KHz SP COLOR BAR 1KHz (EP MONOSCOPE)	①	CHECKING OF THE TAPE TRANSPORTING SYSTEM
2	CLEANING TAPE (DAEWOO)	DHC-602V	②	CHECKING OF THE TAPE TRANSPORTING SYSTEM
3	CASSETTE TAPE (KOKUSAI)	KT-300NV KT-300RV	③	MEASUREMENT OF REEL TORQUE
4	VHS SPINDLE HEIGHT GAUGE	TSH-V4	④	MEASUREMENT OF REEL HEIGHT
5	TENTELO METER (TENTELO)	T2-H7-UM	⑤	MEASUREMENT OF THE BACK TENSION
6	FAN TYPE TENSION METER	BELOW 3KG	⑥	MEASUREMENT OF THE PRESSING FORCE FOR THE PINCH ROLLER
7	DENTAL MIRROR		⑦	CHECKING OF THE TAPE TRANSPORTING SYSTEM
8	+DRIVER		⑧-1	ASSEMBLY, DISASSEMBLY AND ADJUSTMENT
	HEX DRIVER		⑧-2	
	ADJUSTMENT DRIVER		⑧-3	

2-3-2) SKETCH OF JIGS AND TOOLS



3. DISASSEMBLY AND REPLACEMENT

3-1. FRONT LOADING ASS'Y REMOVAL (See Fig. 3-1)

NOTE:

The FRONT LOADING ASSEMBLY can be removed only in the eject position.

- Remove 2 screws ① fixing THE FRONT LOADING ASS'Y.
- Lift the rear of THE FRONT LOADING ASSEMBLY to separate it from the MAIN BASE.

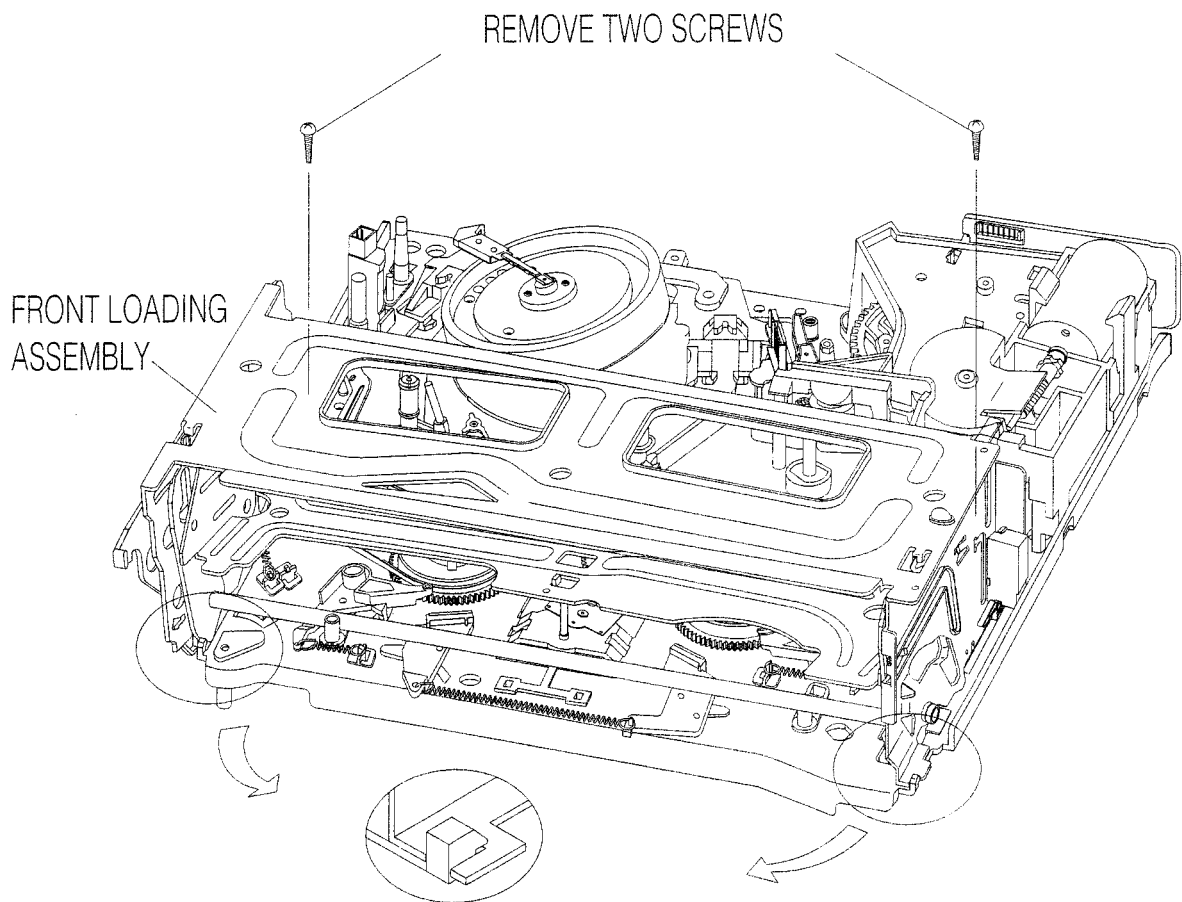


Fig.3-1 FRONT LOADING ASS'Y SEPARATION

3-2. DISASSEMBLY OF THE FRONT LOADING ASS'Y (See Fig. 3-2~3-6)

- a. Remove one screw holding the F/L BRACKET R and move the F/L BRACKET R in the direction of arrow to separate it from the TOP PLATE and CASSETTE HOLDER ASSEMBLY.
- b. Remove the CASSETTE HOLDER ASSEMBLY. (Fig. 3-2)

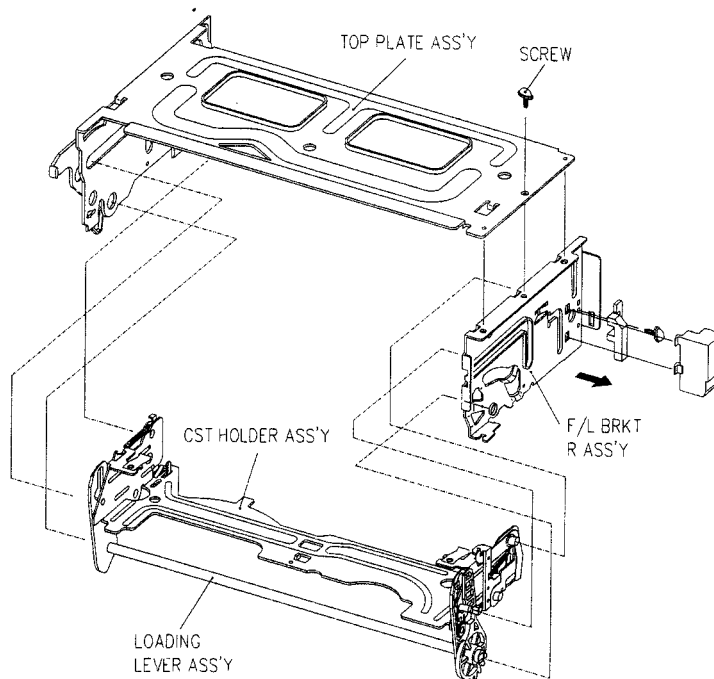


Fig.3-2 DISASSEMBLY OF THE FRONT LOADING ASS'Y

- c. Remove the PRISM CAP and remove one screw holding the PRISM LINK R and remove the PRISM LINK R from the F/L BRACKET R. (Fig. 3-3)

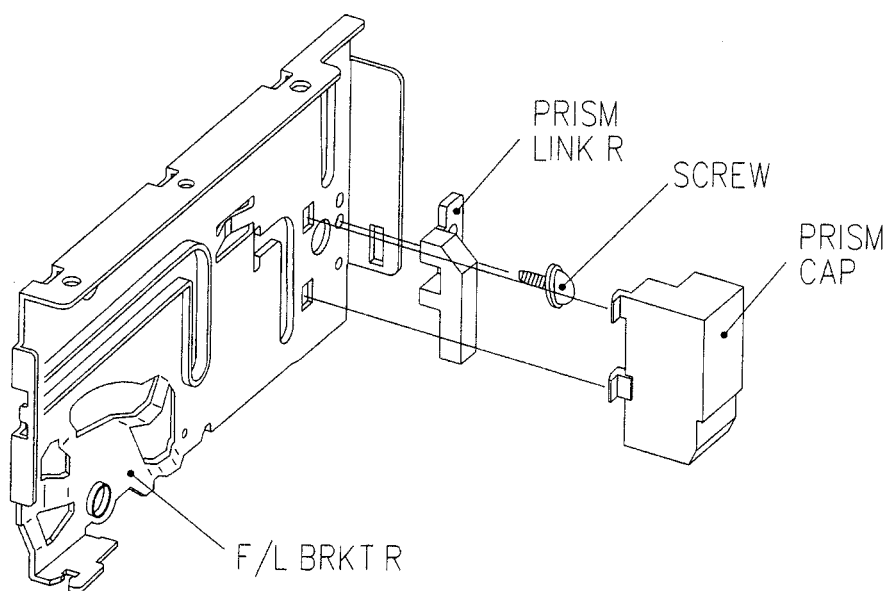


Fig.3-3 DISASSEMBLY OF THE F/L BRKT R

d. Remove one screw holding the PRISM LINK L. (Fig. 3-4)

e. Release the hook B by pushing it in the direction of the arrow and remove the DOOR OPENER. (Fig. 3-4)

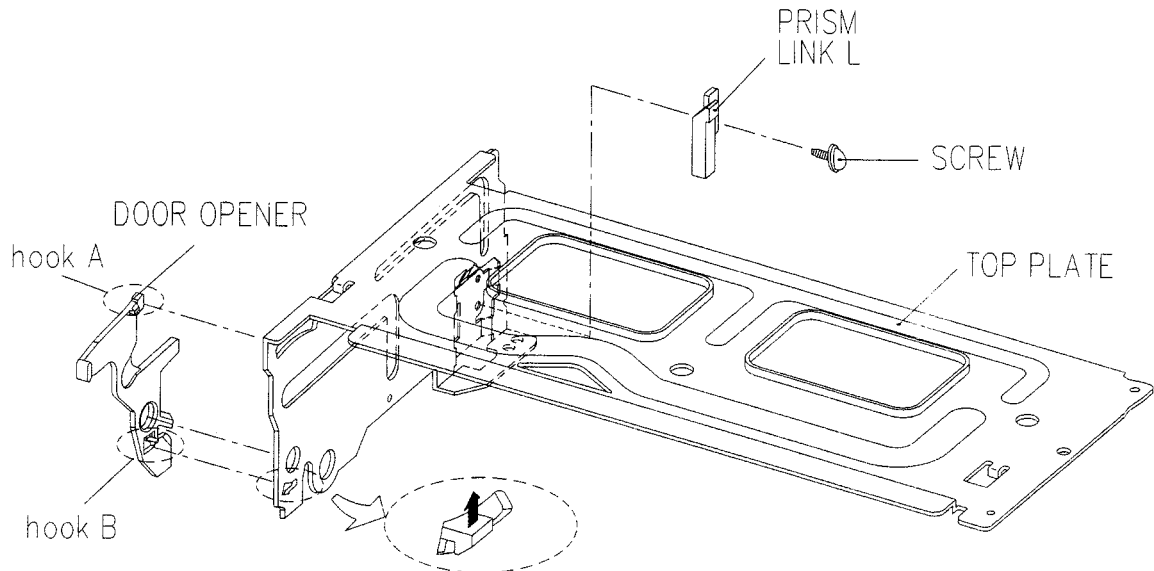


Fig. 3-4 DISASSEMBLY OF THE TOP PLATE

f. Remove the LOADING LEVER ASSEMBLY by pressing the connected section of the loading lever assembly in the directions of the arrows. (Fig. 3-5)

g. Remove the SAFETY SPRING between the SAFETY LEVER and the CASSETTE HOLDER PLATE. (Fig. 3-5)

h. Remove the RELEASE SPRING between the RELEASE LEVER and the SAFETY LEVER R. (Fig. 3-5)

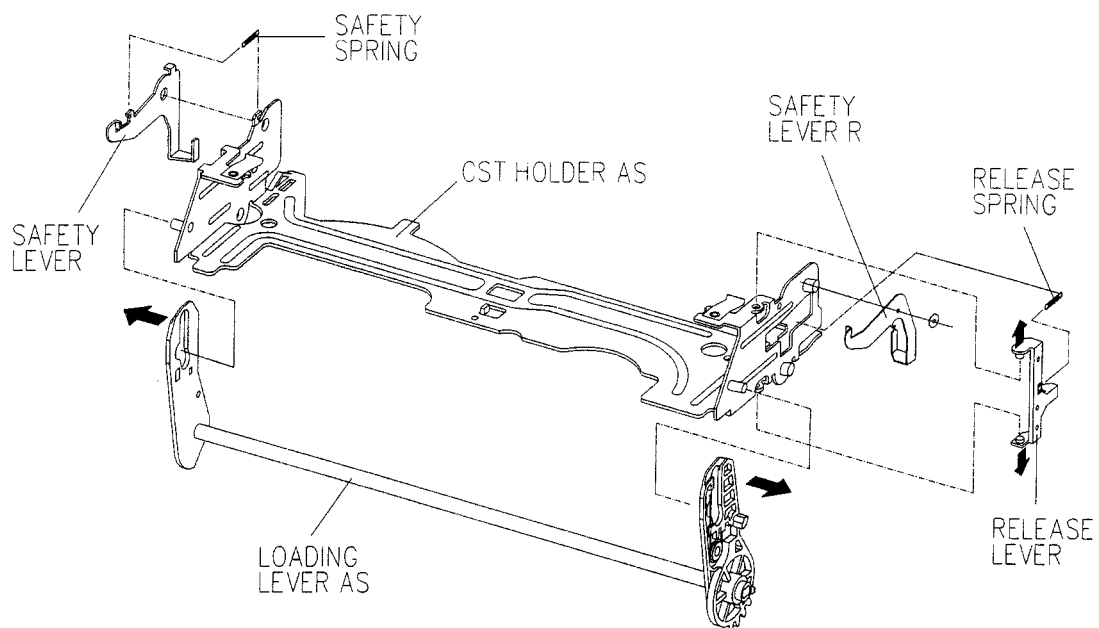


Fig.3-5 DISASSEMBLY OF THE CASSETTE HOLDER ASS'Y

NOTE:

Reassemble the FRONT LOADING MECHANISM in the reverse order. Confirm that two bosses on the left side of the CASSETTE HOLDER AS are inserted into the groove on the left side of the top plate. Insert two bosses on the right side of the cassette holder into the groove of the F/L BRACKET R (Fig. 3-6)

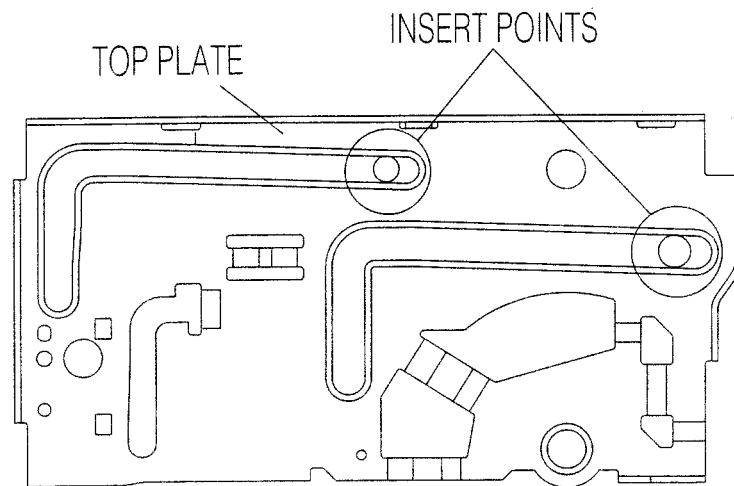


Fig.3-6 ASSEMBLY OF THE F/L ASS'Y

3-3. DRUM ASS'Y/EARTH BRACKET ASS'Y REMOVAL (See Fig.3-7)

- Remove three screws ① fixing the DRUM TOTAL ASSEMBLY.
- Remove the EARTH BRACKET ASSEMBLY ②.
- Carefully lift the DRUM TOTAL ASSEMBLY ③ from the DECK MECHANISM taking care not to damage or touch the VIDEO HEAD.

NOTE:

- After assembling the DRUM TOTAL ASSEMBLY, confirm that the TAPE runs smooth and check the chapter 5 "ADJUSTMENT OF THE TAPE TRANSPORTING SYSTEM".
- When assembling the EARTH BRACKET ASSEMBLY, the 3x12 screw should be used and at the other parts, the 3x10 screws should be used.

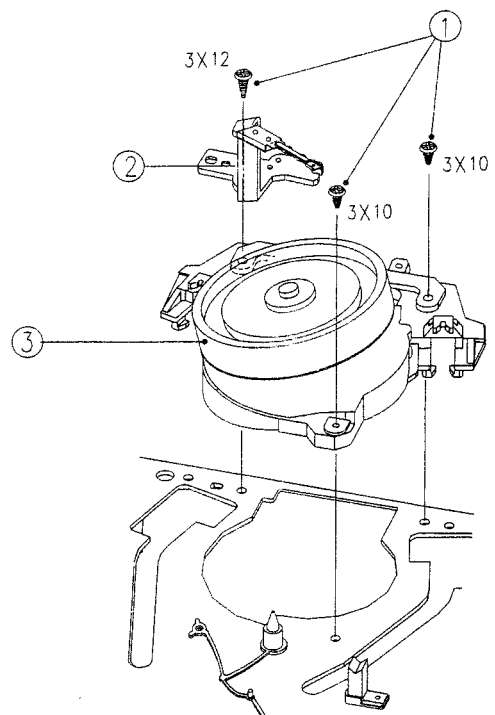


Fig.3-7 DRUM TOTAL ASS'Y & EARTH BRKT ASS'Y REMOVAL

3-4. REEL BELT, LOADING RACK ASS'Y, LOADING ASS'Y, S/T SLANT POLE ASS'Y REMOVAL (See Fig.3-8)

- Turn over the DECK MECHANISM and remove the REEL BELT ①.
- Remove one POLY WASHER ②.
- Remove the LOADING RACK ASS'Y ③.
- Remove R & L LOADING ASS'YS ④ and ⑤.
- Remove the S and T SLANT POLES ⑥ and ⑦ by pulling them in the directions of the arrows.

CAUTION:

- Take care not to get the GUIDE ROLLERS of the S/T SLANT POLES stained with the GREASE
- When reassembling, refer to Fig. 3-9

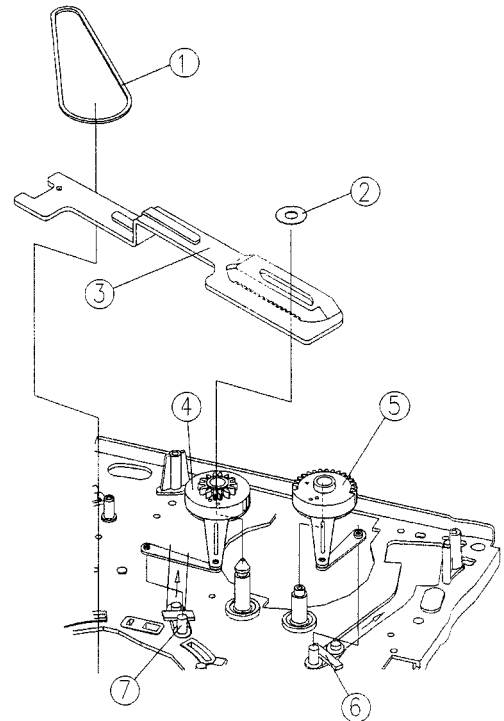


Fig.3-8 REEL BELT, LOADING RACK ASS'Y, R & L LOADING ASS'YS, S/T SLANT POLE ASS'Y REMOVAL

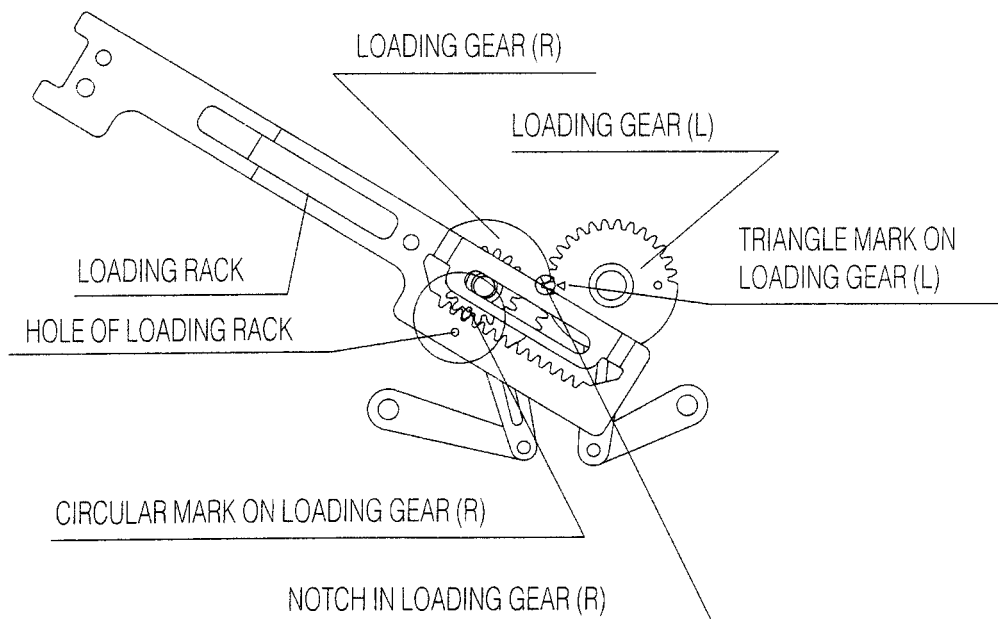


Fig.3-9 ASSEMBLY OF the R,L LOADING ASS'Y & LOADING RACK ASS'Y

3-5. A/C HEAD ASS'Y REMOVAL (See Fig.3-10)

- Remove one nut hex ① from the A/C HEAD POST ④ of the MAINBASE.
- Remove the A/C HEAD ASSEMBLY ② from the MAINBASE.
- Remove the A/C HEAD SPRING ③ from the A/C HEAD ASSEMBLY ②.

NOTE:

- After reassembling, adjust the TAPE TRANSPORTING SYSTEM referring to the chapter 5 "ADJUSTMENT OF THE TAPE TRANSPORTING SYSTEM".
- After adjusting the TAPE TRANSPORTING SYSTEM, spread the A/C HEAD/NUT, AZIMUTH SCREW, and TILT SCREW with LOCKING PAINT.

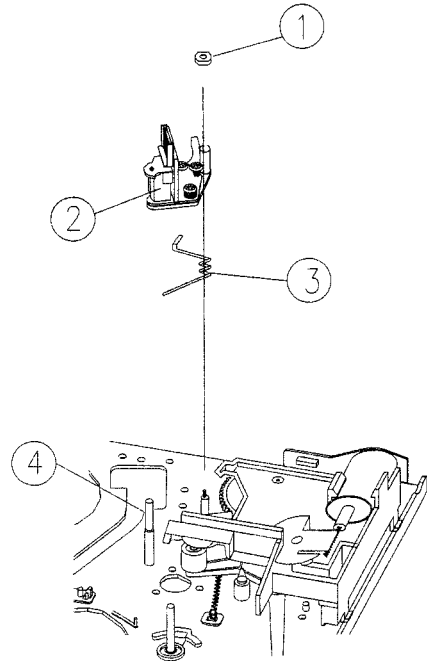


Fig.3-10 DISASSEMBLY OF THE AC HEAD ASS'Y

3-6. L/C BRACKET ASS'Y REMOVAL (See Fig.3-11)

- Remove one screw ① from the L/C BRACKET ASSEMBLY ②.
- Remove the L/C BRACKET ASSEMBLY ② from the MAINBASE.

3-7. PINCH LEVER TOTAL ASS'Y REMOVAL (See Fig.3-11)

- Remove one POLY WASHER ③ from the PINCH LEVER POST of the MAINBASE.
- Unhook the PINCH LEVER SPRING ④ from the hook of MAINBASE ⑤ and remove the PINCH LEVER TOTAL ASSEMBLY ⑨.

CAUTION:

Take care not to coat the GREASE, the OIL or the other substances on the surface of the PINCH ROLLER ⑩.

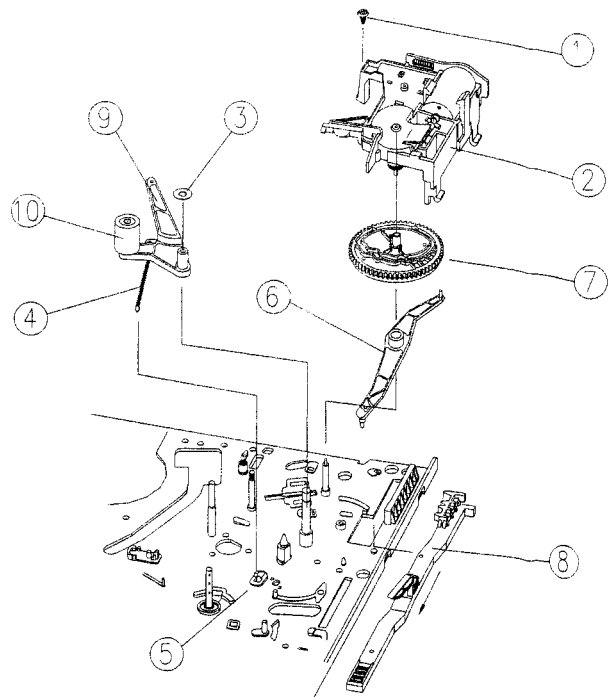


Fig.3-11 L/C BRKT, PINCH LEVER, CAM GEAR, RELAY LEVER, F/L RACK REMOVAL

3-8. CAM GEAR, RELAY LEVER AND F/L RACK REMOVAL (See Fig.3-11)

- Remove the CAM GEAR ⑦ from the MAINBASE. (Fig.3-11)
- Remove the RELAY LEVER ⑥ from the MAINBASE. (Fig. 3-11)
- Remove the F/L RACK ⑧ from the MAINBASE by pulling it in the direction of the arrow.

NOTE:

When reassembling, refer to Fig. 3-12, 13.

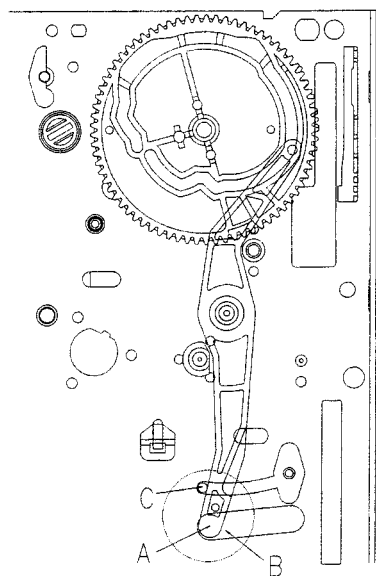


Fig.3-12 ASSEMBLY OF THE CAM GEAR & RELAY LEVER

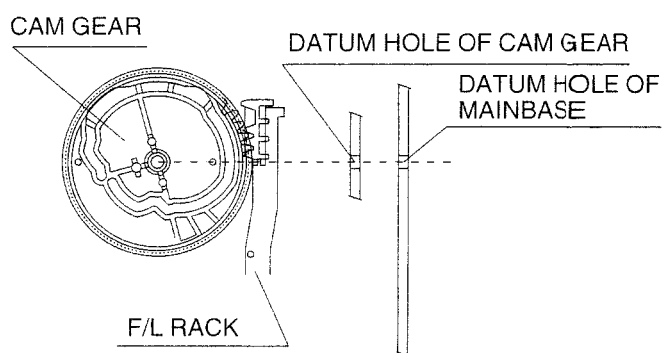


Fig.3-13 ASSEMBLY OF THE CAM GEAR & F/L RACK

3-9. S/T MAIN & SUB BRAKE ASS'Y REMOVAL (See Fig.3-14)

- Unhook the MAIN BRAKE SPRING ① from the T MAIN BRAKE LEVER ③ and remove the T MAIN BRAKE ASSEMBLY ③.
- Remove the S MAIN BRAKE ASSEMBLY ② from the MAINBASE ⑧.
- Unhook the S SUB BRAKE SPRING ④ from the MAINBASE and remove the S SUB BRAKE LEVER ASSEMBLY ⑤ from the MAIN BASE ⑧.
- Unhook the T SUB BRAKE SPRING ⑥ from the MAINBASE and remove the T SUB BRAKE LEVER ASSEMBLY ⑦.

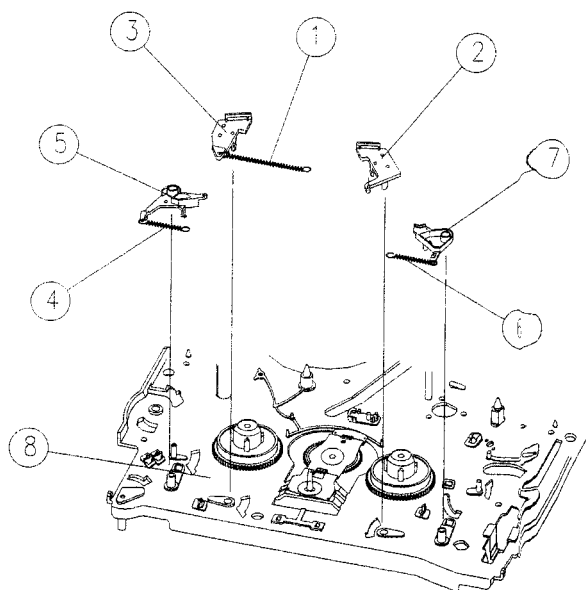


Fig.3-14 S/T MAIN & SUB BRAKES REMOVAL

3-10. TENSION BAND ASS'Y REMOVAL (See Fig.3-15, 3-16)

- Remove the TENSION SPRING ② from the MAINBASE ①. (Fig.3-15)
- Turn the DECK MECHANISM over. (Fig.3-16)
- After separating the tab of hook 'A', remove the TENSION BAND ASSEMBLY ③. (Fig.3-16)

NOTE:

- After assembling the TENSION BAND ASSEMBLY on the MAINBASE, adjust the position of TENSION POLE as shown Fig. 3-17.
- Avoid getting GREASE, OIL or foreign substance on the FELT of the BAND BRAKE.
- Take care not to deform the tab 'A' when separating the tab 'A'.

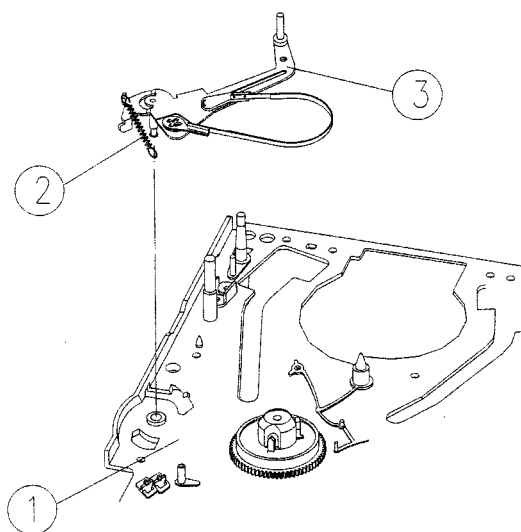


Fig.3-15 TENSION BAND ASS'Y REMOVAL (I)

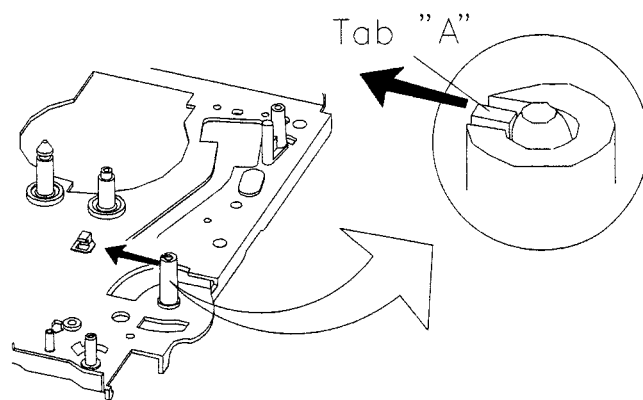


Fig.3-16 TENSION BAND ASS'Y REMOVAL (II)

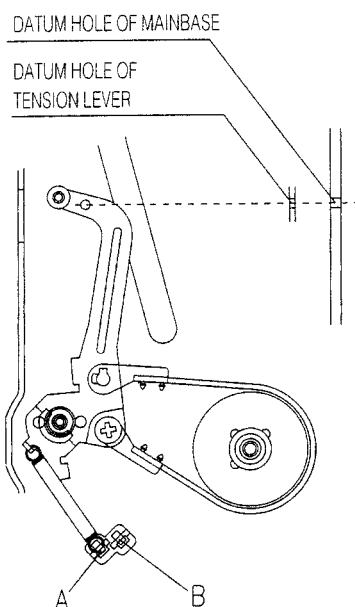


Fig.3-17 ADJUSTMENT OF THE TENSION POLE POSITION

3-11. CAPSTAN MOTOR REMOVAL (See Fig.3-18)

Remove 3 screws fixing the CAPSTAN MOTOR and separate the CAPSTAN MOTOR.

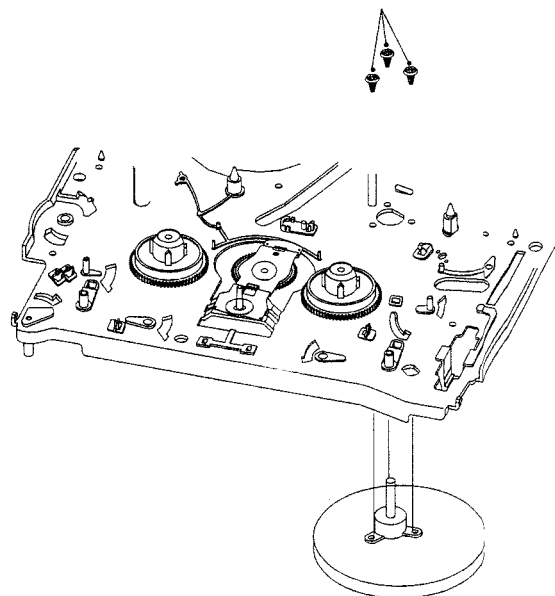


Fig.3-18 CAPSTAN MOTOR REMOVAL

3-12. IDLER PLATE TOTAL ASS'Y & S/T REEL TABLE REMOVAL (See Fig.3-19)

- a. Remove one POLY WASHER ① from the REEL GEAR POST ② and remove the IDLER PLATE TOTAL ASSEMBLY ③ from the MAIN BASE.
- b. Remove the S/T REEL TABLES ④ and two POLY SLIDERS ⑤ from the DECK MECHANISM.

CAUTION:

- When disassembling or assembling the IDLER PLATE TOTAL ASSEMBLY, take care not to bend it.

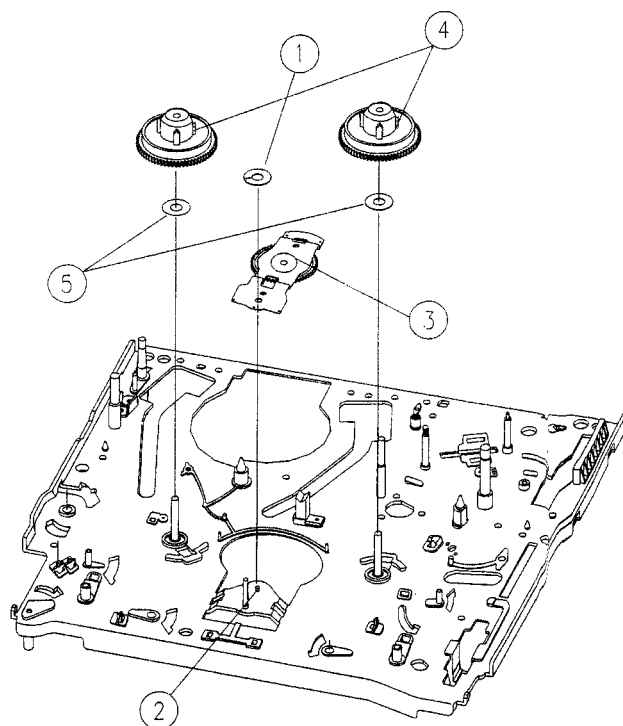


Fig.3-19 IDLER PLATE TOTAL ASS'Y & S/T REEL TABLES REMOVAL

3-13. FE HEAD REMOVAL (See Fig.3-20)

Remove one screw ① fixing the FE HEAD and remove the FE HEAD ② from the MAINBASE.

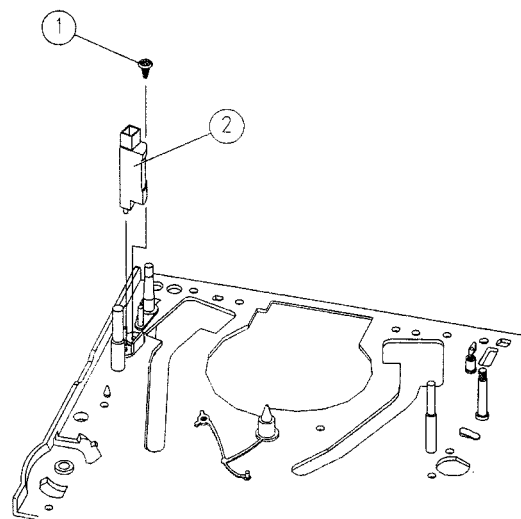


Fig.3-20 FE HEAD REMOVAL

3-14. REEL GEAR TOTAL ASS'Y & CONNECT PLATE REMOVAL (Fig.3-21)

- Turn over the DECK MECHANISM and remove one POLY WASHER ① from the REEL GEAR POST ②.
- After separating the tab 'B' of MAINBASE, remove the REEL GEAR TOTAL ASSEMBLY ③ from the MAINBASE.
- Remove the CONNECT PLATE ④ from the MAINBASE by pushing CONNECT PLATE in the direction of the arrow.

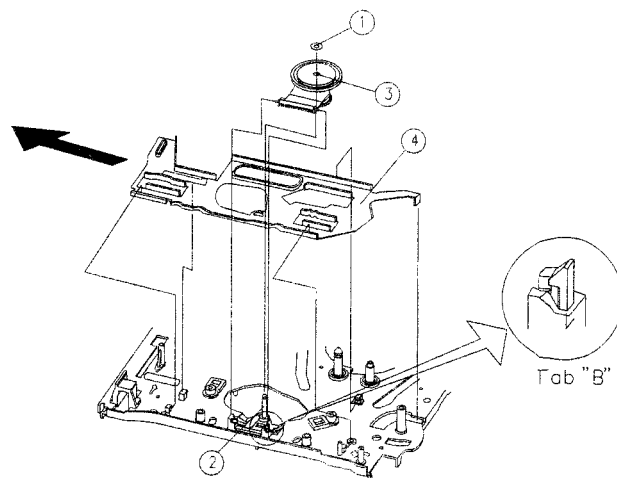


Fig.3-21 REEL GEAR TOTAL ASS'Y & CONNECT PLATE REMOVAL

NOTE:

- When removing the CONNECT PLATE with the F/L RACK installed, take care not to damage or bend the CONNECT PLATE.
- After assembling or disassembling the REEL GEAR TOTAL ASSEMBLY, take care not to get the OIL, the GREASE or the other substances on the REEL BELT.
- Take care not to change or break the tab "B".
- Check the assembly state & the operating state of the REEL GEAR TOTAL ASSEMBLY before assembling.
- After reassembling, check the FF, REW, PLAY and REVIEW MODE and the existence of noise during operating the MODES.

4. MECHANICAL ADJUSTMENT

4-1. MECHANICAL ADJUSTMENT (See Fig.4-1~4-5)

When operational problems occur or the mechanism reassembles, be sure to confirm the following INSTRUCTIONS.

- a. Make sure that the DATUM HOLE of the CAM GEAR is aligned with the DATUM HOLE in the MAINBASE in the EJECT mode as shown in Fig.4-1.

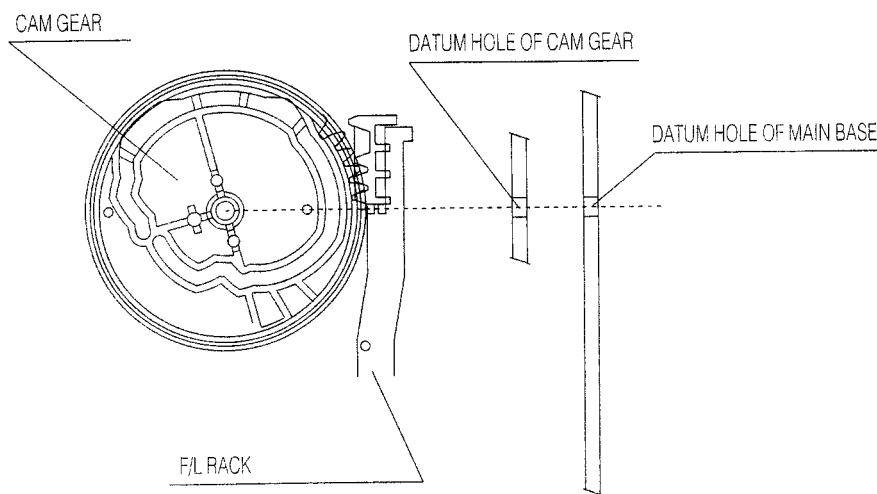


Fig.4-1 DATUM POSITION OF F/L RACK & CAM GEAR

- b. Make sure that the ending part "A" of the RELAY LEVER assembled in the CONNECT PLATE is fully rotated up to the left side of "B" of the MAINBASE and is attached to the boss "C" of the MAINBASE as shown in Fig.4-2.

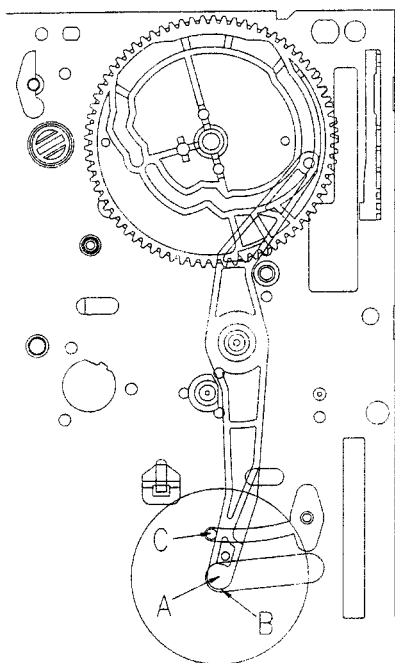


Fig.4-2 DATUM POSITION OF RELAY LEVER & CAM GEAR

- c. When reassembling the L/C BRACKET TOTAL ASSEMBLY on the MAINBASE, make sure that the two triangular marks of CAM SWITCH are aligned with each other as shown in Fig.4-3.

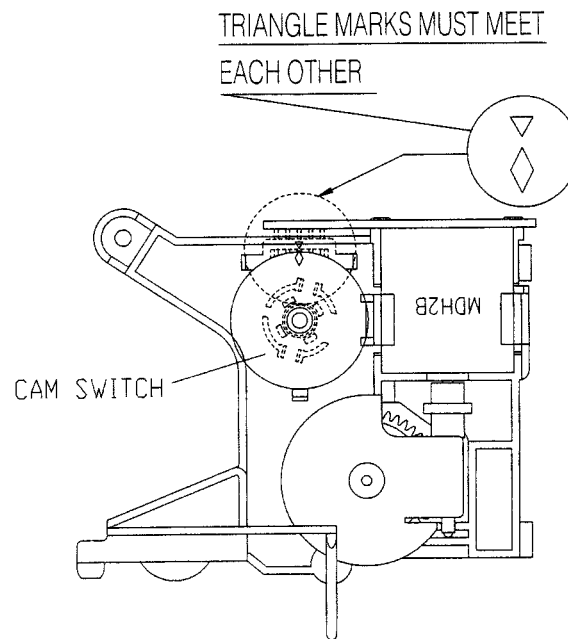


Fig.4-3 DATUM POSITION OF CAM SWITCH TRIANGULAR MARKS

- d. Make sure that the boss "A" of the PINCH LEVER TOTAL ASSEMBLY is positioned at the point "B" of the CAM GEAR as shown in Fig.4-4.

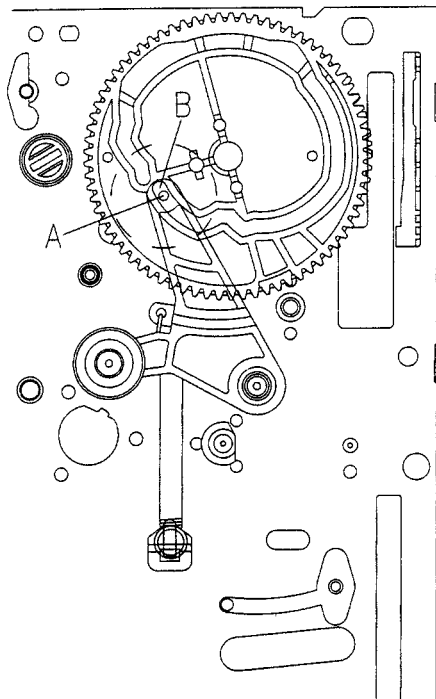


Fig.4-4 DATUM POSITION OF PINCH LEVER TOTAL ASS'Y & CAM GEAR

- e. Make sure that the triangular mark "A" on the L LOADING ASSEMBLY is aligned with the notch "B" on the R LOADING ASSEMBLY as shown in Fig. 4-5.
- f. Make sure that the teeth of the LOADING RACK ASSEMBLY is aligned with the those of the R LOADING ASSEMBLY so that the hole of the LOADING RACK ASSEMBLY aligns with the circular mark on the R LOADING ASSEMBLY as shown in Fig.4-5.

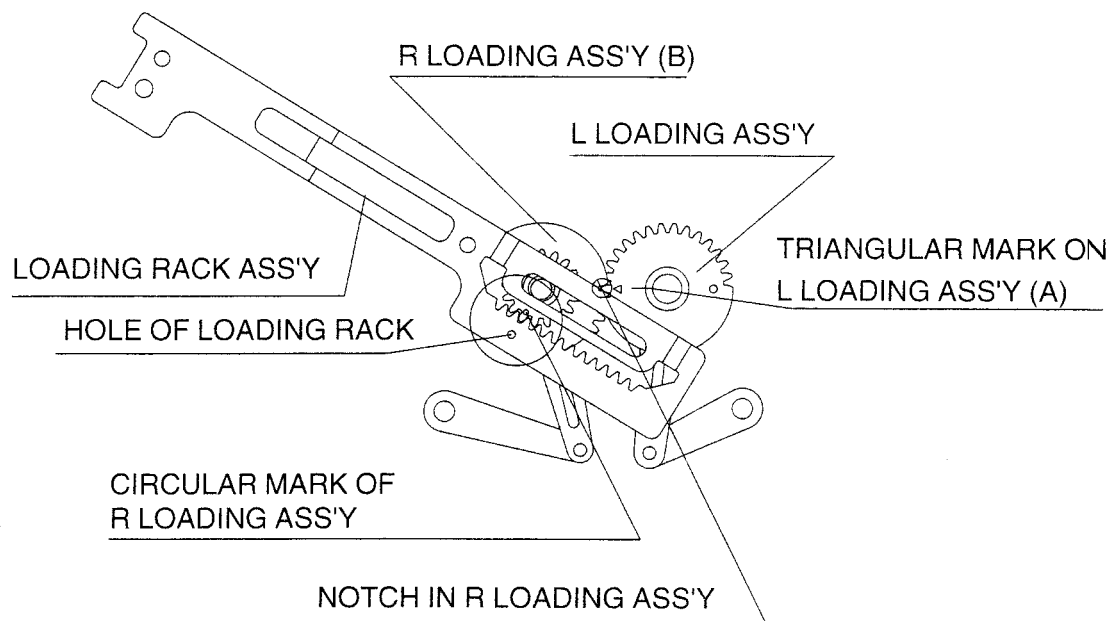


Fig.4-5 DATUM POSITION OF LOADING RACK ASS'Y & R/L LOADING LEVER ASS'YS

4-2. BACK TENSION MEASUREMENT (See Fig.4-6~4-7)

- Confirm that the position of the TENSION POLE is correctly POSITIONED. Refer to the "4-4 TENSION POLE POSITION ADJUSTMENT".
- Play back a T-120 TAPE at its center position without assembling F/L ASSEMBLY and wait until the TAPE running is stabilized (about 5~10 seconds).
- Bring the TENTELOMETER into contact with the TAPE (Fig.4-6) and measure the BACK TENSION. The measuring result should be between 25 and 33 grams.
- If the measuring result is not within this specification, refer to the below NOTE or repeat "4-4 TENSION POLE POSITION ADJUSTMENT". (Fig. 4-7)

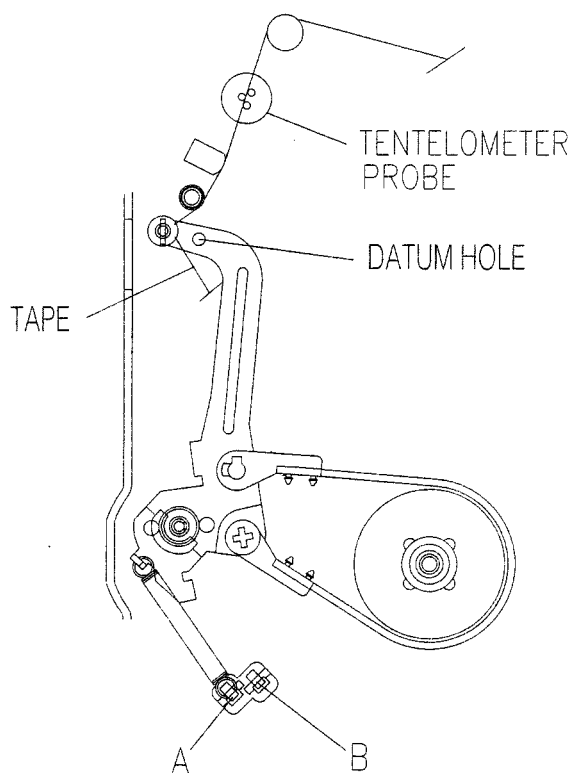


Fig.4-6 BACK TENSION MEASUREMENT

NOTE:

- If the measuring result is not within the specification, change the TENSION SPRING position. (To decrease the result, choose hook A. Otherwise, choose hook B).
- Confirm that all of the three probes of the TENSION METER are in contact with the TAPE. During this process, don't touch any other parts of the MECHANISM (i.e, MAINBASE).
- It is recommended that this measurement be repeated at least three times for an accurate reading.

4-3. MECHANICAL MODE (OPERATING THE VCR WITHOUT A CASSETTE TAPE)

- a. Remove the FRONT LOADING MECHANISM from the DECK MECHANISM.
- b. Pull the F/L RACK.
- c. The S/T POLE BASE are loaded and PLAY BACK MODE starts.
- d. Turn off the power when the MECHANISM is in the desired position.

4-4. TENSION POLE POSITION ADJUSTMENT

- a. Place the MECHANICAL MODE in the PLAY MODE. Refer to the "4-3 MECHANICAL MODE".
- b. Confirm that the datum hole of TENSION LEVER is aligned with the datum hole of the MAIN BASE.
- c. If the requirement "b" is not satisfied, turn the BAND BRAKE ADJUST CAP clockwise or counter-clockwise until two datum holes aligns with each other.

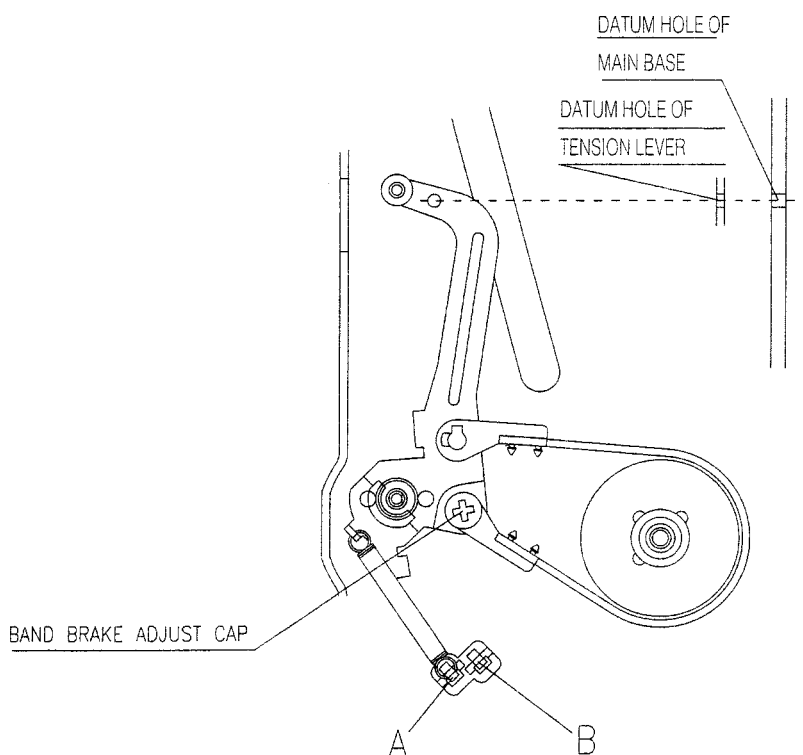


Fig.4-7 TENSION POLE POSITION ADJUSTMENT

5. ADJUSTMENT OF TAPE TRANSPORTING SYSTEM

Generally the TAPE TRANSPORTING SYSTEM has been precisely adjusted in the factory and does not require the ordinary readjustment. But when the noise and the tape damage take place and part assemblies that compose the TAPE TRANSPORTING SYSTEM are replaced, check and readjust the TAPE TRANSPORTING SYSTEM. Refer to the following FLOW CHART in order to adjust the TAPE TRANSPORTING SYSTEM.

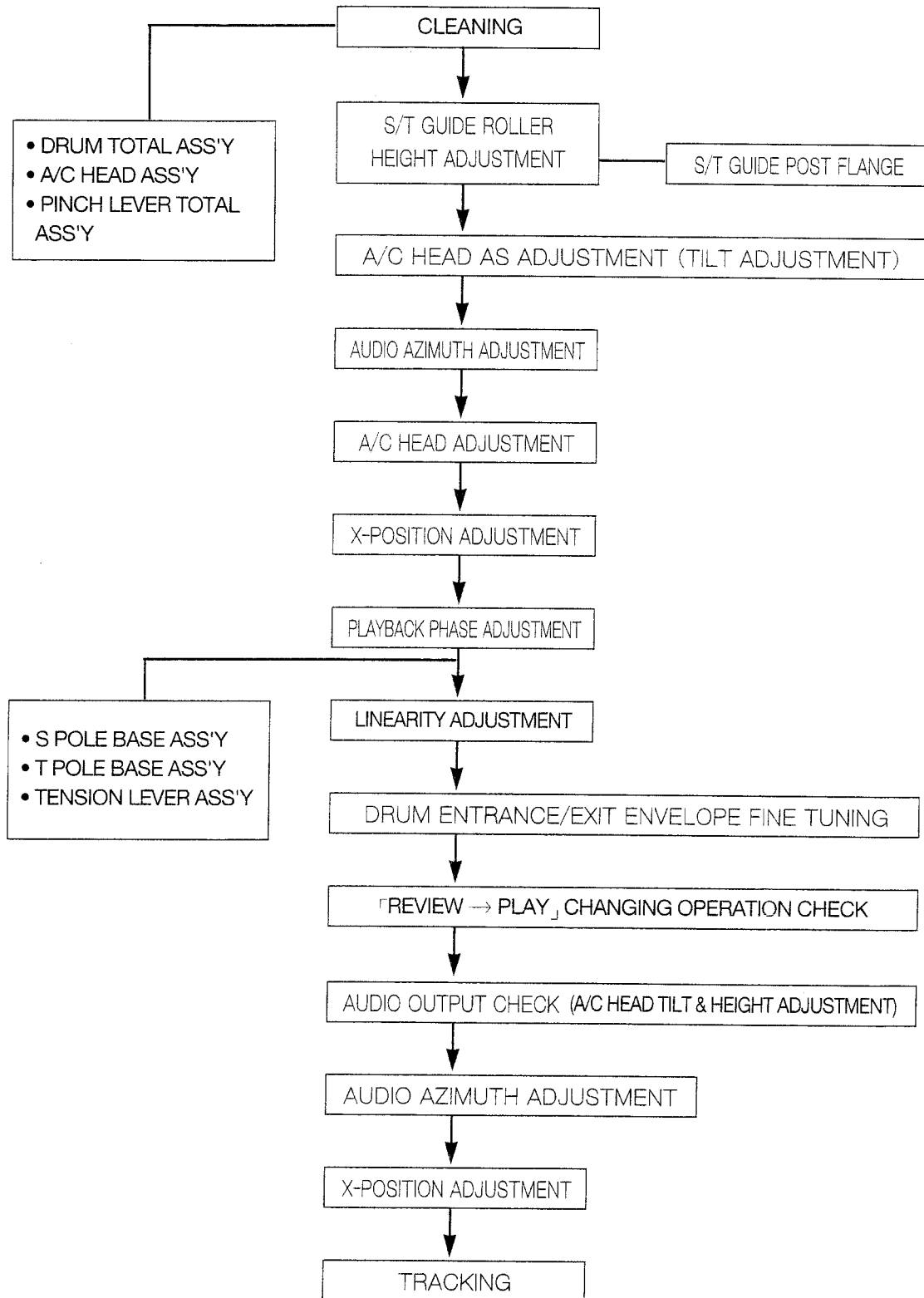


Table.1 ADJUSTMENT FLOW DIAGRAM OF THE TAPE TRANSPORTING SYSTEM

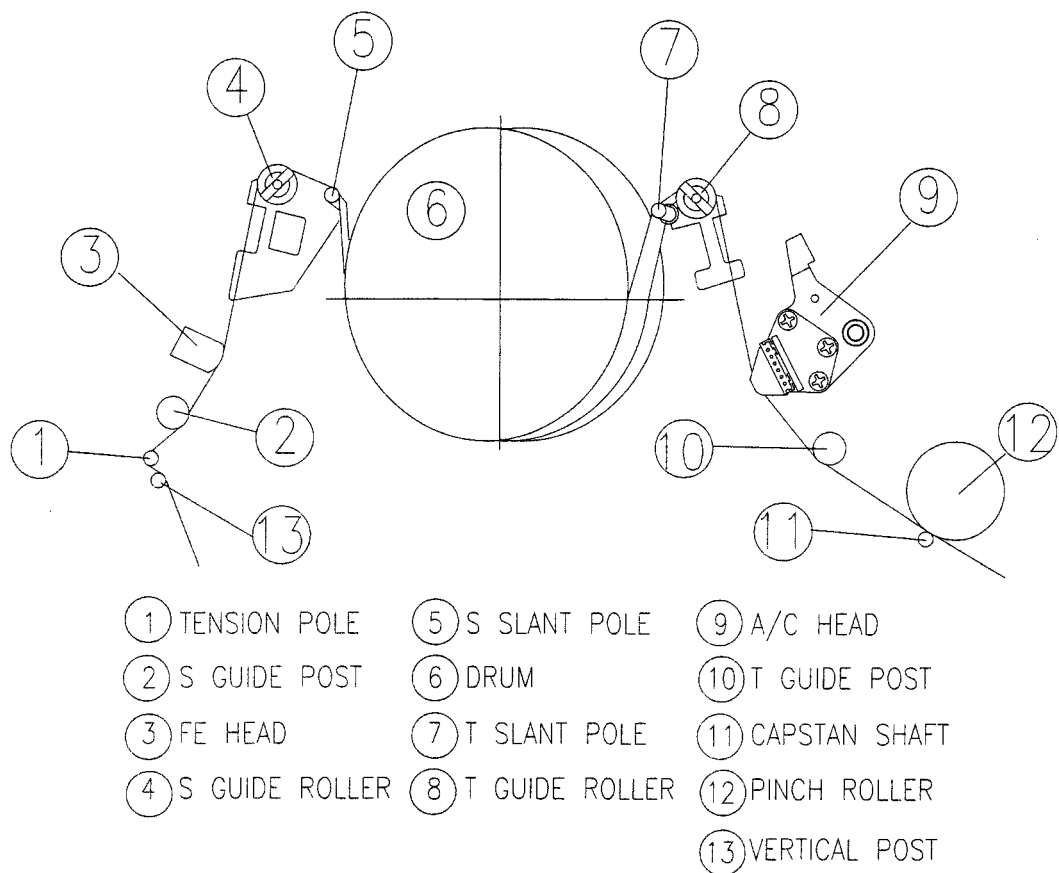


Fig. 5-1 THE SCHEMATIC DIAGRAM OF TAPE TRANSPORTING SYSTEM

When the parts as shown in Fig. 5-1 are replaced, the TAPE TRANSPORTING SYSTEM is changed. To prevent this, it is essential to know well thoroughly and observe the following INSTRUCTIONS.

A. ADJUSTMENT OF THE S/T GUIDE ROLLER

- Play back a T-120 TAPE.
- Make sure that the excessive TAPE wrinkle does not occur at each S/T GUIDE ROLLER.
- If TAPE wrinkle is observed at the S/T GUIDE ROLLER, turn them for no wrinkle.

B. ADJUSTMENT OF THE A/C HEAD ASS'Y (TILT ADJUSTMENT)

- Play back a T-120 Tape and see the running condition of the TAPE at the lower flanges of the T GUIDE POST ASS'Y ⑪ in Fig. 5-1.
- Adjust the A/C HEAD TILT SCREW until TAPE runs stable as shown in Fig. 5-2

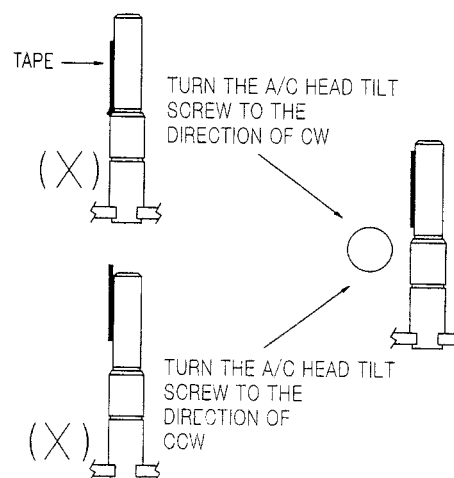
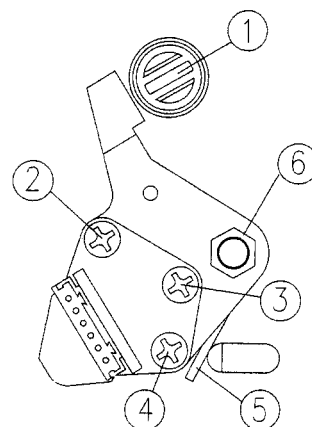


Fig. 5-2 A/C HEAD ASS'Y ADJUSTMENT
(TILT ADJUSTMENT)

C. ADJUSTMENT OF THE AUDIO AZIMUTH (See Fig.5-3)

- Play back the ALIGNMENT CASSETTE TAPE (DN2: SP, NTSC, 7KHz).
- Observe audio signals on an OSCILLOSCOPE.
- Turn the A/C HEAD AZIMUTH SCREW to obtain the maximum audio output signal (-9~-3dBm).



- | | |
|-------------------------|------------------|
| ① ADJUST BOSS | ④ FIXING SCREW |
| ② AC HEAD AZIMUTH SCREW | ⑤ AC HEAD SPRING |
| ③ AC HEAD TILT SCREW | ⑥ AC HEAD NUT |

Fig. 5-3 A/C HEAD ASS'Y

D. THE HEIGHT ADJUSTMENT OF A/C HEAD

- Play back a T-120 TAPE.
- Make sure that the gap is 0.25mm between the lower end of TAPE and that of A/C HEAD.
- When the gap is longer than 0.25mm, turn the A/C HEAD HEIGHT ADJUST NUT counter-clockwise. When the gap is shorter than 0.25mm, turn it clockwise. Repeat this procedure until 0.25mm is obtained.

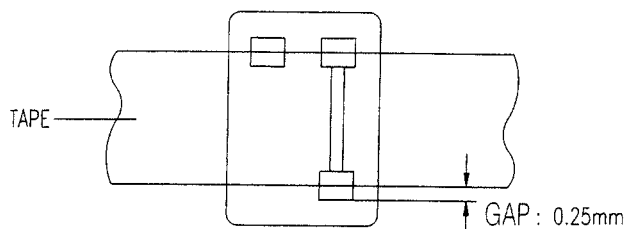


Fig. 5-4 A/C HEAD ASS'Y ADJUSTMENT (HEIGHT ADJUSTMENT)

E. X-POSITION ADJUSTMENT

TEST POINTS	S/W PULSE TEST PIN	PATH ADJ. FIXTURE
	ENVELOPE TEST PIN	PATH ADJ. FIXTURE
MEASURING EQUIPMENT	OSCILLOSCOPE	
ADJUSTMENT	VR CONTROL	PATH ADJ. FIXTURE
	ADJUST BOSS	MAIN BASE.

- Connect path adjustment fixture to PT01 of the MAIN CIRCUIT BOARD.
- Play back the ALIGNMENT TAPE (COLOR BAR ALIGNMENT).
- Connect channel-1 scope probe to S/W PULSE TEST PIN of PATH ADJ, FIXTURE.
- Connect channel-2 scope probe to ENVELOPE TEST PIN of PATH ADJ, FIXTURE.
- Turn the VR CONTROL to the center point. (If the VR CONTROL is completely turned to counter-clockwise, it is positioned on another tracking center.)
- In the state that the position of the VR CONTROL is on the center, turn the ADJUST BOSS by using FLAT TYPE SCREW DRIVER and adjust the X-POSITION to obtain the maximum envelope waveform.

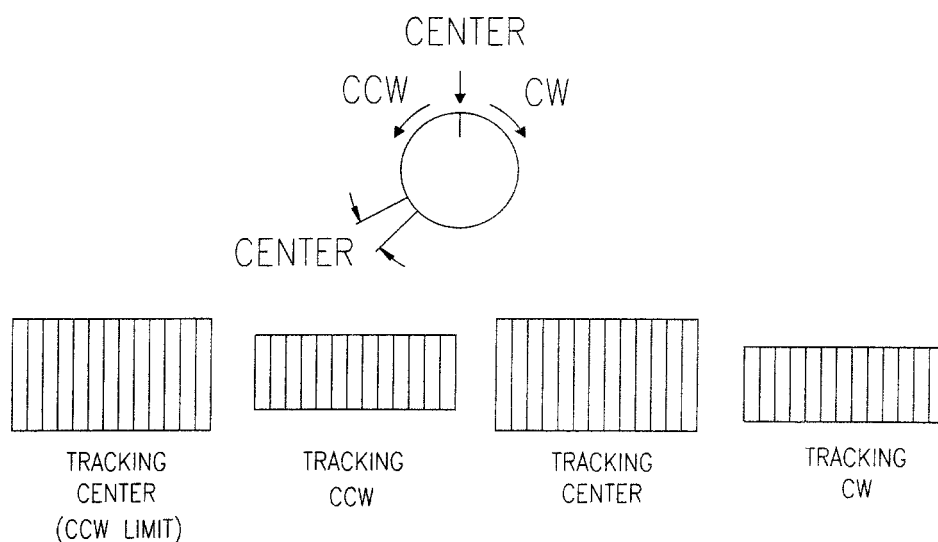


Fig. 5-5 X-POSITION ADJUSTMENT

F. PLAYBACK PHASE ADJUSTMENT (See Fig. 5-6)

TEST POINTS	S/W PULSE TEST PIN	PATH ADJ. FIXTURE
	VIDEO OUT	MAIN CIRCUIT BOARD
MEASURING EQUIPMENT	OSCILLOSCOPE	
ADJUSTMENT	VR595 (PG SHIFTER)	MAIN CIRCUIT BOARD

Phase generator (PG) shifter decides the VIDEO HEAD switching point when a TAPE is played back. In case the Phase generator (PG) shifter isn't correctly tuned, the HEAD switching noise or vertical jitter may occur.

- Connect the PATH ADJ. FIXTURE to PT01 of the MAIN CIRCUIT BOARD.
- Play the ALIGNMENT TAPE (COLOR BAR SIGNAL OR MONOSCOPE SIGNAL)
- Connect the channel-1 scope probe to the S/W PULSE TEST PIN of the PATH ADJ. FIXTURE.
- Connect the channel-2 scope probe(1V/div.) to the VIDEO OUT of the MAIN CIRCUIT BOARD.
- Play back the ALIGNMENT TAPE.
- Adjust the PG volume for time interval of $6.5H \pm 0.5$ between switching pulse and V-sync signal.

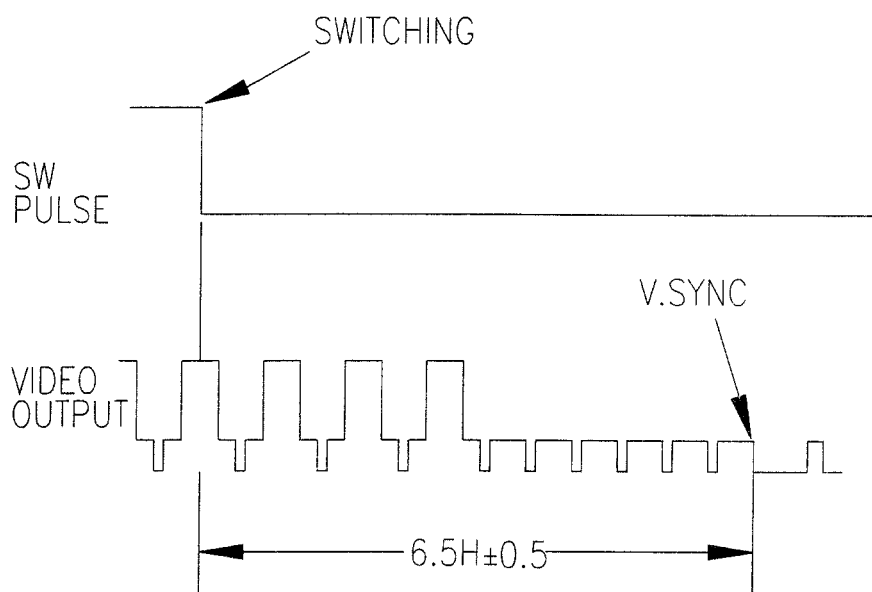


Fig. 5-6 PLAYBACK PHASE ADJUSTMENT

G. LINEARITY ADJUSTMENT

TEST POINTS	S/W PULSE TEST PIN	PATH ADJ. FIXTURE
	ENVELOPE TEST PIN	PATH ADJ. FIXTURE
MEASURING EQUIPMENT	OSCILLOSCOPE	
ADJUSTMENT	VR CONTROL	PATH ADJ. FIXTURE
	S/T GUIDE ROLLER	TAPE TRANSPORTING SYSTEM

- Connect the PATH ADJ. FIXTURE to PT01 of the MAIN CIRCUIT BOARD.
- Play back the ALIGNMENT TAPE (COLOR BAR SIGNAL).
- Connect the channel-1 scope probe to the S/W PULSE TEST PIN of the PATH ADJ. FIXTURE.
- Connect the channel-2 scope probe to the ENVELOPE TEST PIN of the PATH ADJ. FIXTURE.
- Adjust the VR CONTROL of the PATH ADJ. FIXTURE for maximum envelope signal output of the alignment tape.
- Adjust the S/T GUIDE ROLLER until the envelope signal waveforms of the entrance and the exit sides are as shown in Fig. 5-7.

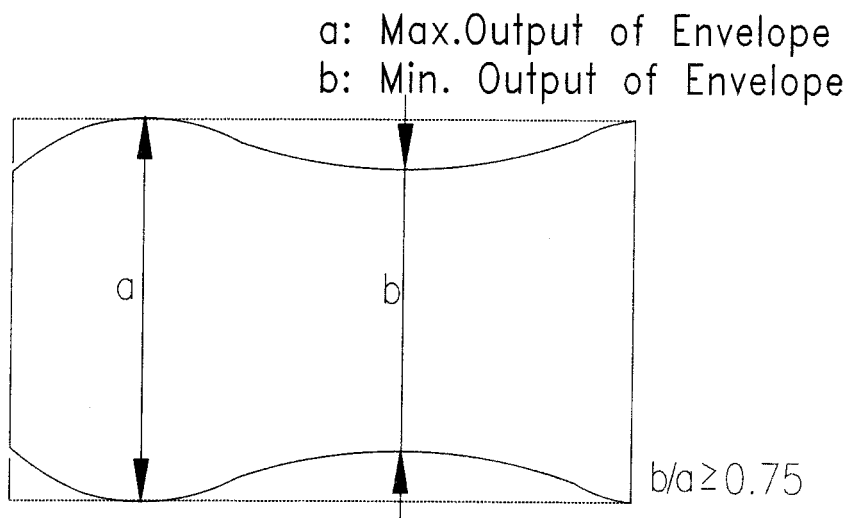


Fig. 5-7 LINEARITY ADJUSTMENT

H. DRUM ENTRANCE /EXIT (See Fig. 5-8, 5-9)

TEST POINTS	S/W PULSE TEST PIN	PATH ADJ. FIXTURE
	ENVELOPE TEST PIN	PATH ADJ. FIXTURE
MEASURING EQUIPMENT	OSCILLOSCOPE	
ADJUSTMENT	VR CONTROL	PATH ADJ. FIXTURE
	S/T GUIDE ROLLER	TAPE TRANSPORTING SYSTEM

- a. Connect the PATH ADJ. FIXTURE to PT01 the MAIN CIRCUIT BOARD.
- b. Play back the ALIGNMENT TAPE (COLOR BAR SIGNAL).
- c. Connect the channel-1 scope probe to the S/W PULSE TEST PIN of the PATH ADJ. FIXTURE.
- d. Connect the channel-2 scope probe to the ENVELOPE TEST PIN of the PATH ADJ. FIXTURE.
- e. When turning the VR CONTROL of the PATH ADJ. FIXTURE clockwise or counter-clockwisw, affirm that the envelope is generally changed in equal thickness.
- f. If the envelope is not uniform and regular, adjust the S/T GUIDE ROLLER.

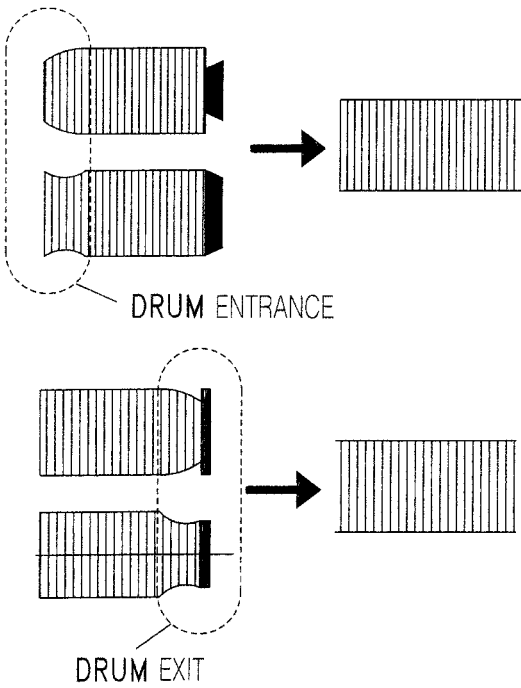


Fig. 5-8 FINE TUNING OF THE ENVELOPE AT THE DRUM ENTRANCE/EXIT (I)

Fig.5-9 FINE TUNING OF THE ENVELOPE AT THE DRUM ENTRANCE/EXIT (II)

I. REVIEW → PLAY (See Fig. 5-10)

TEST POINTS	S/W PULSE TEST PIN	PATH ADJ. FIXTURE
	ENVELOPE TEST PIN	PATH ADJ. FIXTURE
MEASURING EQUIPMENT	OSCILLOSCOPE	
ADJUSTMENT	VR CONTROL	PATH ADJ. FIXTURE
	S/T GUIDE ROLLER	TAPE TRANSPORTIN SYSTEM

- Connect the PATH ADJ. FIXTURE to PT01 of the MAIN CIRCUIT BOARD.
- Play back the ALIGNMENT TAPE (SP, COLOR BAR SIGNAL).
- Connect the channel-1 scope probe to the S/W PULSE TEST PIN of the PATH ADJ. FIXTURE.
- Connect the channel-2 scope probe to the ENVELOPE TEST PIN of the PATH ADJ. FIXTURE.
- Adjust the VR CONTROL of the PATH ADJ. FIXTURE to the center to obtain the maximum envelope signal of the ALIGNMENT TAPE.
- After operating the VCR in the REVIEW MODE about 15 secs, change the REVIEW MODE to the PLAY BACK MODE.
- Change operation mode from REVIEW MODE to PLAY MODE and then make sure that the envelope waveform is restored to the maximum condition within 3 seconds.
- If the requirement is not satisfied, make sure that the TAPE runs normal at the lower part of the T GUIDE POST. Then adjust the S/T GUIDE ROLLER precisely.

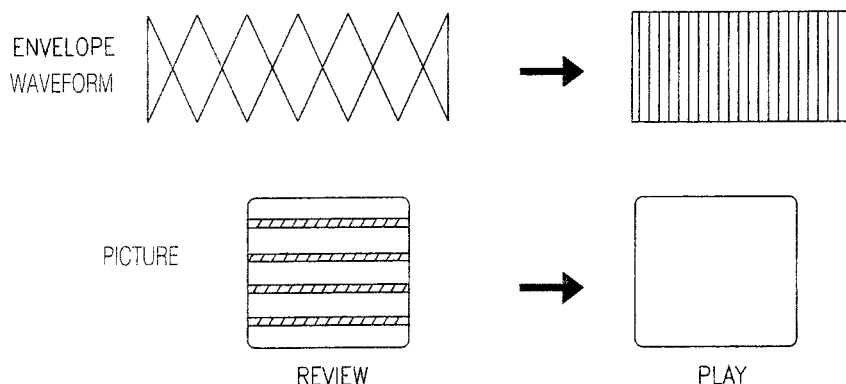


Fig. 5-10 CHECK OF TRANSITIONAL OPERATION (FROM REVIEW WAVEFORM TO PLAY WAVEFORM)

J. AUDIO OUTPUT (A/C HEAD TILT & HEIGHT ADJUSTMENT)

TEST POINTS	AUDIO OUTPUT	AUDIO OUTPUT JACK
MEASURING EQUIPMENT	OSCILLOSCOPE	

- Connect the OSCILLOSCOPE to the AUDIO OUTPUT JACK.
- Play back the ALIGNMENT TAPE (DN1, 1KHz).
- Check the AUDIO OUTPUT SIGNAL is -9~-3dBm.
- If the requirement "c" is not satisfied, adjust the A/C HEAD TILT SCREW and A/C HEAD HEIGHT NUT to obtain the maximum audio output. (Fig. 5-3)

K. A/C HEAD AZIMUTH ADJUSTMENT

- Connect the OSCILLOSCOPE to the AUDIO OUTPUT JACK.
- Play back the ALIGNMENT TAPE (STAIR STEPS, 7KHZ).
- Adjust the A/C HEAD AZIMUTH SCREW to obtain the audio output -9~-3dBm. (Fig. 5-3)
- Repeat the process "H. DRUM ENTRANCE/EXIT".

TEST POINTS	AUDIO OUTPUT	AUDIO OUTPUT JACK
MEASURING EQUIPMENT	OSCILLOSCOPE	

L. X-POSITION (See Fig. 5-11)

TEST POINTS	S/W PULSE TEST PIN	PATH ADJ. FIXTURE
	ENVELOPE TEST PIN	PATH ADJ. FIXTURE
MEASURING EQUIPMENT	OSCILLOSCOPE	
ADJUSTMENT	VR CONTROL	PATH ADJ. FIXTURE
	ADJUST BOSS	MAIN BASE.

- Connect the PATH ADJ. FIXTURE to PT01 of the MAIN CIRCUIT BOARD.
- Play back the ALIGNMENT TAPE (COLOR SIGNAL BAR).
- Connect the channel-1 scope probe to the S/W PULSE TEST PIN of the of the PATH ADJ. FIXTURE.
- Connect the channel-2 scope probe to the ENVELOPE TEST PIN of the PATH ADJ. FIXTURE.
- Adjust the VR CONTROL to the center position. (When the VR CONTROL is completely turned counter-clockwise, it is set at another tracking center position).
- When the VR CONTROL is fully rotated clockwise or counter-clockwise, turn the ADJUST BOSS of the MAINBASE and adjust the X-POSITION for the envelope waveform to be as shown in Fig. 5-11
- Repeat the process "F. PLAYBACK PHASE ADJUSTMENT".

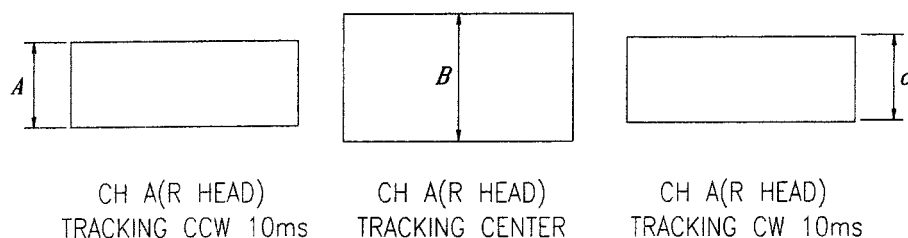
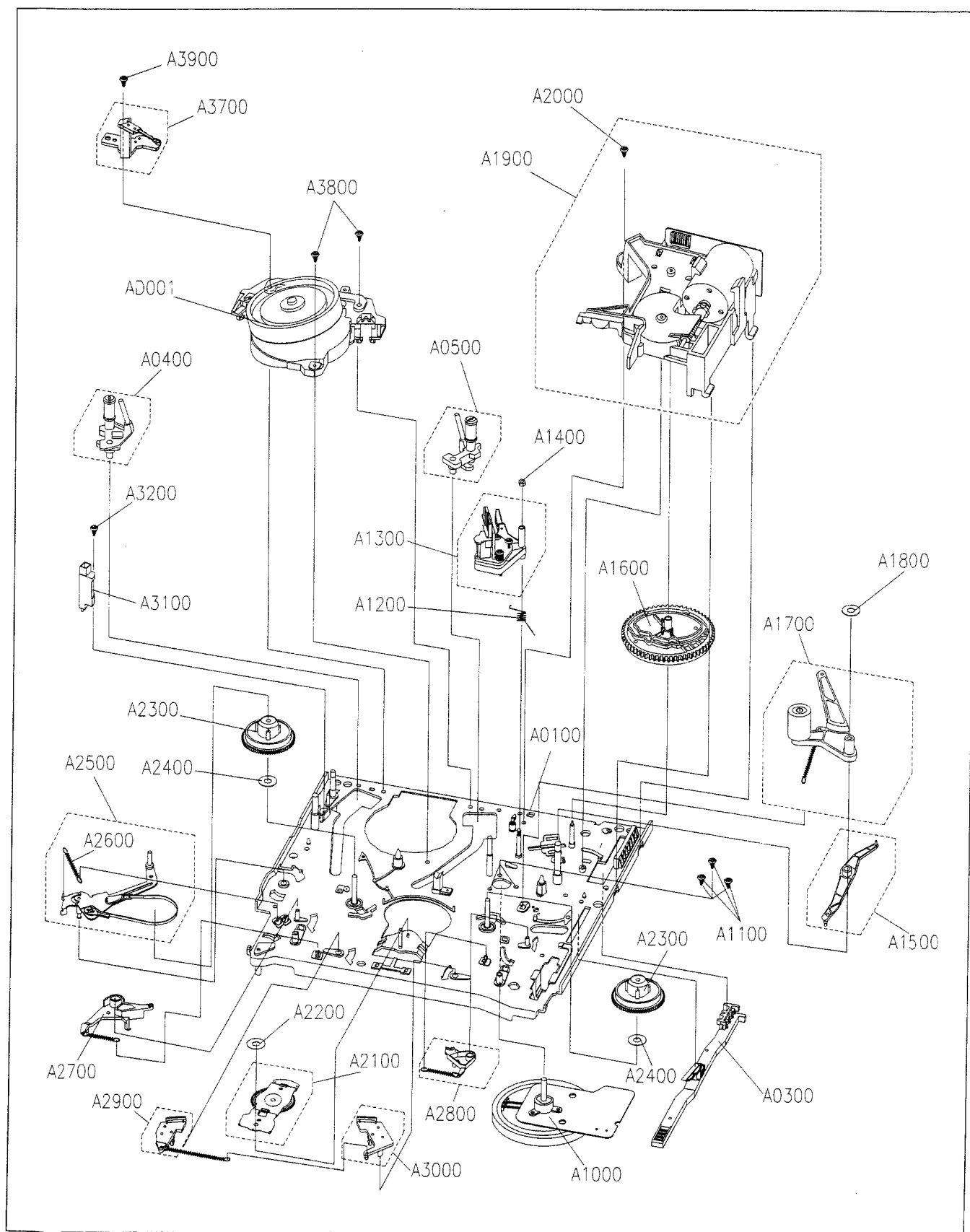


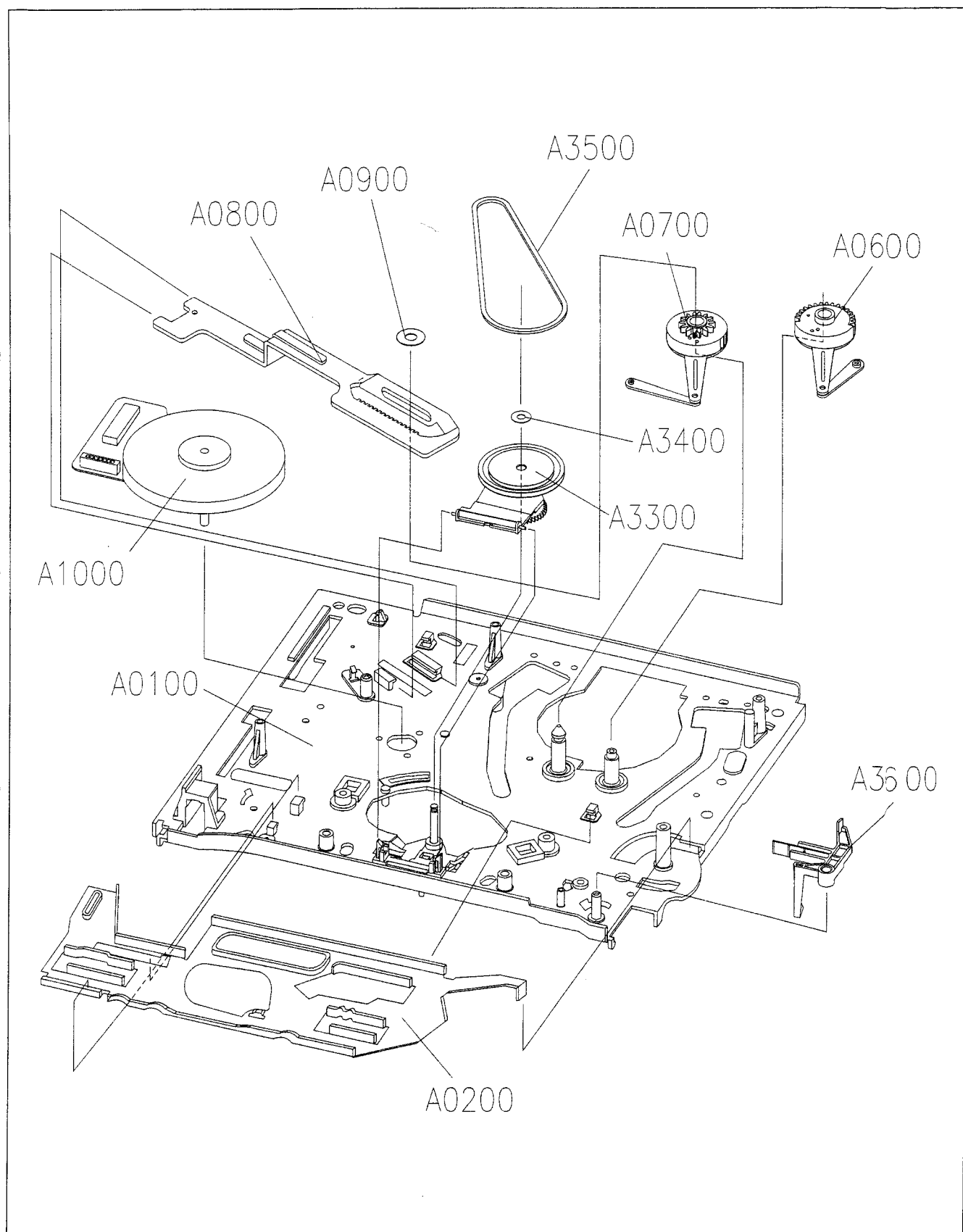
Fig. 5-11 X-POSITION ADJUSTMENT

~~6. EXPLODED VIEW AND PARTS LIST~~

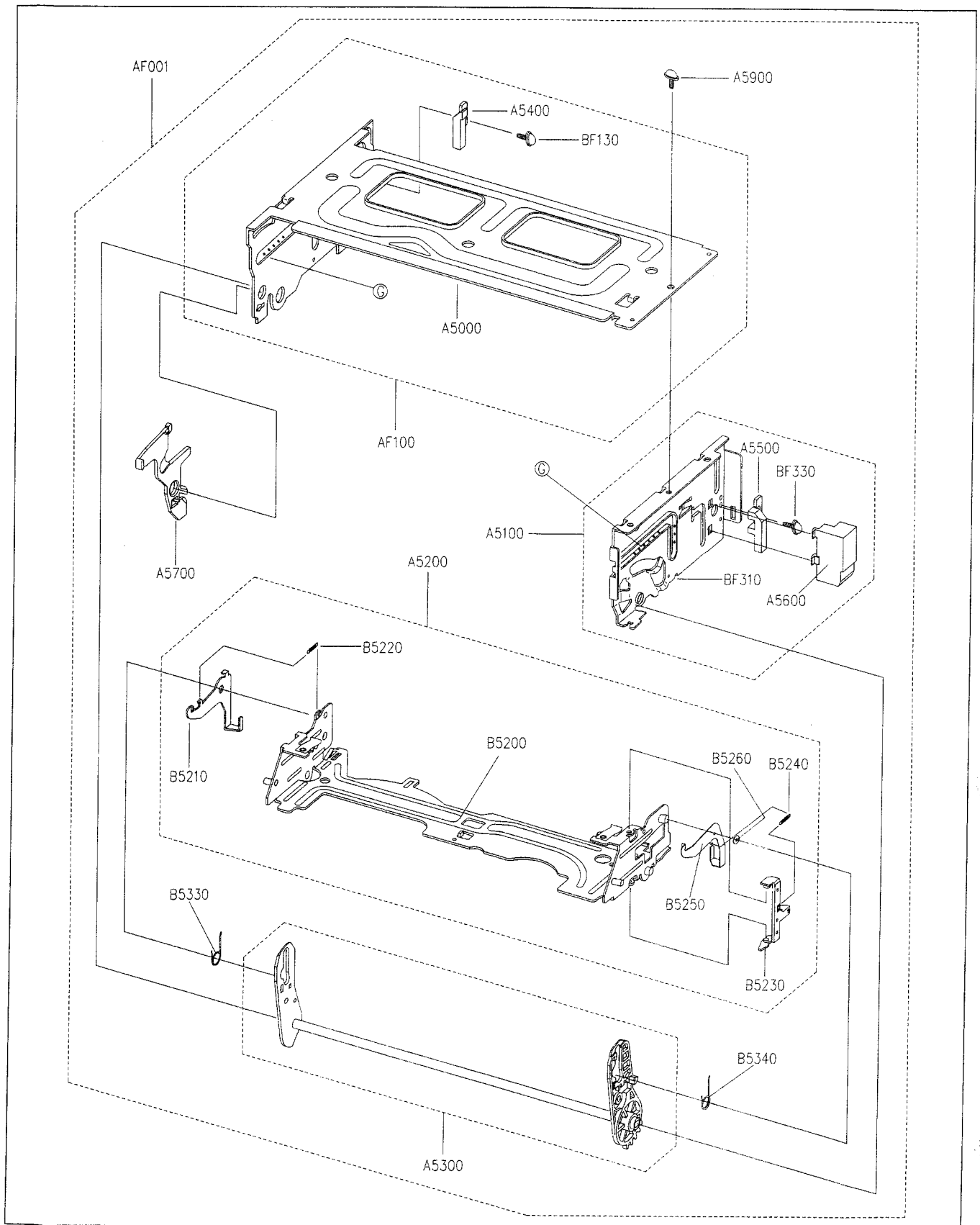
6-1. EXPLODED VIEW OF DECK ASS'Y (TOP VIEW)



6-2. EXPLODED VIEW OF DECK ASS'Y (BOTTOM VIEW)



6-3. EXPLODED VIEW OF F/L ASS'Y



6-4. PARTS LIST OF DECK ASS'Y

LOC.	STOCK NO.	PART NAME	DESCRIPTION
M01	97PB0891D-	DECK TOTAL AS	VDN-72201/K22 (2HD SP/EP DLC)
M01	97PB0892D-	DECK TOTAL AS	VDN-74201/K52 (4HD MONO DLC)
M01	97PB0893D-	DECK TOTAL AS	VDN-76201/K82 (4HD HIFI DLC)
AD001	97PA252371	DRUM PRICE AS	2HD SP/EP DLC (K22)
AD001	97PA254301	DRUM PRICE AS	2HD HIFI DLC
AD001	97PA252471	DRUM PRICE AS	4HD MONO DLC (K52)
AD001	97PA252571	DRUM PRICE AS	4HD HIFI DLC (K82)
AD001	97PA252671	DRUM PRICE AS	6HD MONO DLC (SP 고화질)
AF001	97SA251400	F/L AS	K-MECHA
AM001	97SA252100	DECK AS	K-MECHA
A0100	97SA309700	MAIN BASE AS	K-MECHA
A0200	97S0901400	PLATE CONNECT	SECC T1.0
A0300	97S2701800	RACK F/L	PBT (KP213G30) NATURAL
A0400	97SA310900	S SLANT POLE AS	K-MECHA
A0500	97SA311000	T SLANT POLE AS	K-MECHA
A0600	97SA308500	L LOADING AS	K-MECHA
A0700	97SA308600	R LOADING AS	K-MECHA
A0800	97SA308400	LOADING RACK AS	K-MECHA
A0900	97S3101800	WASHER POLY	K-MECHA
A1000	97S8100700	MOTOR CAPSTAN	F2QTB12
A1000	97S8100800	MOTOR CAPSTAN	DMVCMC06D
A1100	97S3102000	SCREW TAPTITE	P-TITE 2.6X7 MFZN
A1200	97S3004000	SPG AC HEAD	SUS304WPB D1.2
A1300	97SA311200	AC HEAD AS	K-MECHA
A1400	7391300211	NUT HEX	6N-1-5 MFZN
A1500	97S2604100	LEVER RELAY	ZDC-2
A1600	97S2701400	GEAR CAM	DELIN 100 BLACK

LOC.	STOCK NO.	PART NAME	DESCRIPTION
A1700	97SA310700	PINCH LEVER TOT AS	K-MECHA
A1800	97S3117300	WASHER POLY	D3.6XD8XT0.5
A1900	97SA310400	L/C BRKT TOT AS	K-MECHA
A2000	7274300611	SCREW TAPTITE	TT3 RND 3X6 MFZN
A2100	97SA311600	IDLER PLATE AS	K-MECHA
A2200	97S3108200	POLYWASHER	D2.6XD8XT0.5
A2300	97S2901600	TABLE REEL	POM (KEPITAL F20) BLACK
A2400	97S3903600	POLY SLIDER	D3.1XD6XT0.5
A2500	97SA310800	TENSION BAND AS	K-MECHA
A2600	97S3003500	SPG TENSION	SWPB D0.4
A2700	97SA309300	S SUB BRAKE AS	K-MECHA
A2800	97SA309400	T SUB BRAKE AS	K-MECHA
A2900	97SA309100	S MAIN BRAKE AS	K-MECHA
A3000	97SA309200	T MAIN BRAKE AS	K-MECHA
A3100	97S8012900	HEAD FE	HVFHF0004AK
A3200	97S3102100	SCREW TAPTITE	P-TITE 2.6X10 MFZN
A3300	97SA309000	REEL GEAR TOT AS	K-MECHA
A3400	97S3108200	POLYWASHER	D2.6XD6.0XT0.5
A3500	97S5500400	BELT REEL	CR73
A3600	97S2603500	LEVER RECORD SAFETY	F20-03 NATURAL
A3700	97SB381100	EARTH BRACKET AS	G-MECHA, K-MECHA
A3800	7274301011	SCREW TAPTITE	TT3 RND 3X10 MFZN
A3900	7274301211	SCREW TAPTITE	TT3 RND 3X12 MFZN
A4000	7274300611	SCREW TAPTITE	TT3 RND 3X6 MFZN
A4100	2291129004	OIL LUBRICANT	OA-305A
A4200	2291131304	GREASE	DELUXE 5221G (NAM-YOUNG)